

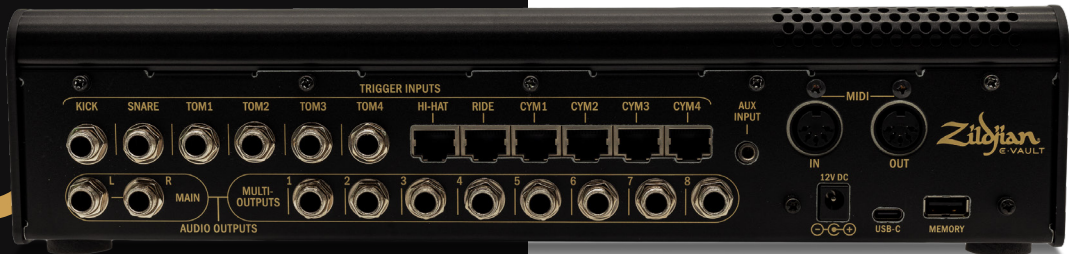


E·VAULT

ELECTRONIC DRUM MODULE USER MANUAL



WELCOME.



SCAN THE
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VIEW THE
FULL DIGITAL
MANUAL AND
SET-UP VIDEO



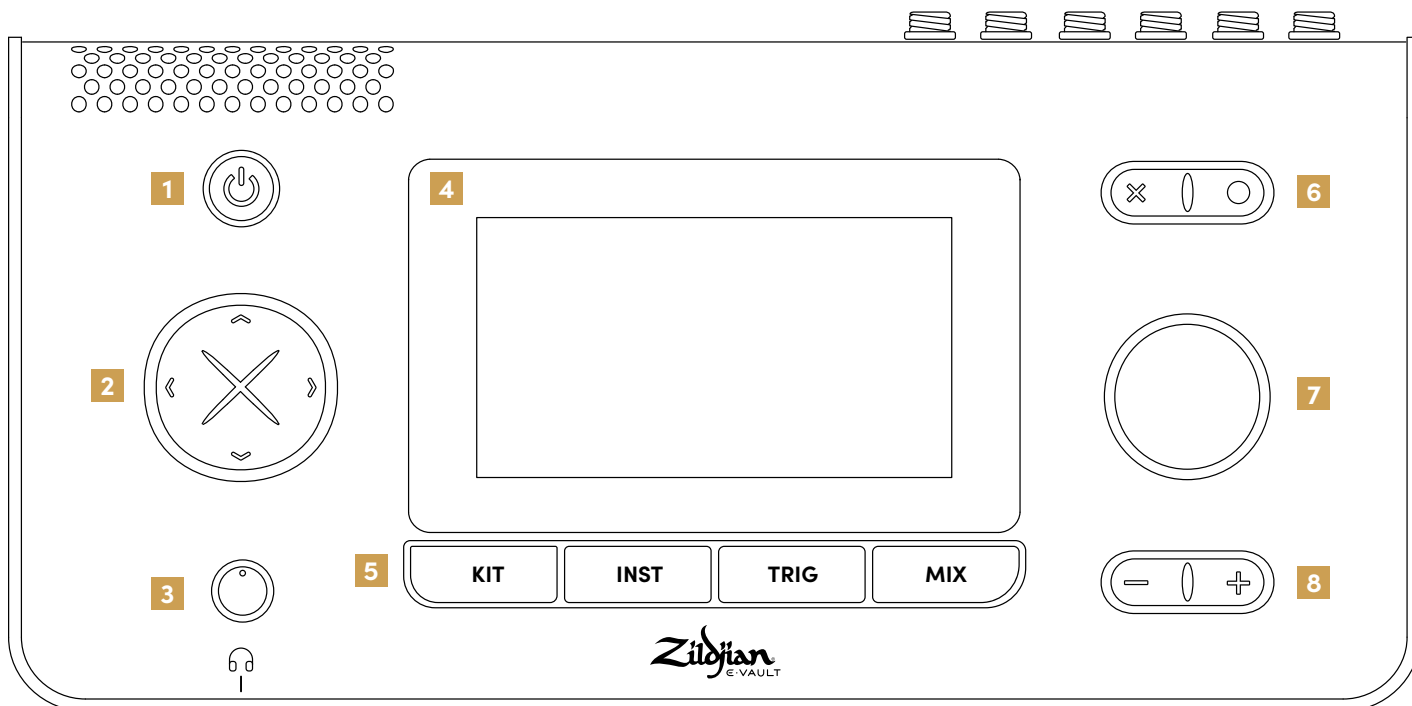
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E-VAULT MODULE

TOP PANEL



1 POWER

Press the power button to turn the module on and off.

2 D-PAD

Use the directional buttons to navigate the screen and select various controls and settings.

3 HEADPHONES VOLUME

Connect headphones to the 1/4" (6.35mm) output jack and turn the knob to adjust the volume.

4 TOUCHSCREEN

The touchscreen interface enables interactive control over system navigation and settings.

5 WORKSPACE BUTTONS

Press a workspace shortcut button to access its screens and functions. To access the System Workspace, long press the [O] button.

6 ACTION BUTTONS

When the corresponding icons are displayed, press the [X] button to cancel actions and exit screens, or the [O] button to confirm or execute actions.

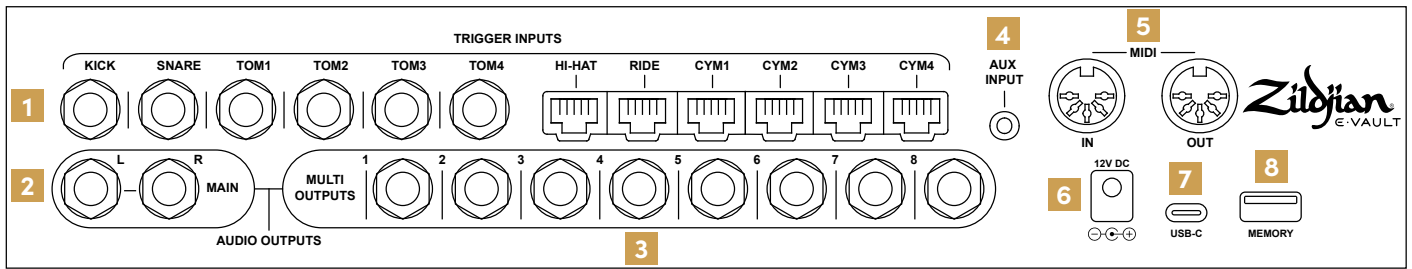
7 ENCODER

Turn the encoder knob to adjust the value of a selected control or setting.

8 MAIN OUTPUT VOLUME

Press the [-] and [+] buttons to display the main output volume screen. Pressing the buttons adjusts the main output volume in dB steps.

REAR PANEL



1 TRIGGER INPUTS

Connect the trigger outputs of the drums and cymbals to the corresponding trigger inputs on the module. Connect the drums using the included ¼" (6.35mm) TRS jack cables. Connect the cymbals using the included RJ45 cables.

2 MAIN OUTPUT

Use ¼" TRS jack cables (not included) to connect the MAIN L-R balanced outputs to a mixer, drum amplifier, or audio interface. Unbalanced TS jacks cables can also be used.

3 MULTI OUTPUTS

The module's configurable multi-output matrix routes audio from instruments and groups to 8 balanced ¼" TRS outputs. Connect these outputs to a mixer or audio interface.

4 AUX INPUT

Connect a stereo audio source using a ⅛" (3.5mm) TRS mini-jack cable (not included). The auxiliary interface is designed for music players and audio devices that output a line level signal.

5 MIDI IN | OUT

Connect an external MIDI device using 5-pin DIN cables (not included).

6 DC IN

Connect the included AC power adapter.

7 USB-C

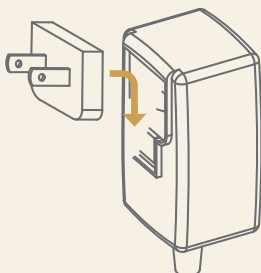
Use a USB-C cable (not included) to connect the module to a computer. Zildjian E-VAULT is a class-compliant audio device that supports multi-channel audio and MIDI data transmission.

8 MEMORY

Connect the included USB flash drive to carry out system updates and backups. The flash drive must be formatted before it can be used.

Format Flash Drive

1. Long press the [O] button to open the SYSTEM Workspace Menu screen
2. Press the [⚙ Settings] button to open the System Settings screen
3. Select the [Format] tab
4. Insert the flash drive into the MEMORY slot on the rear panel of the module
5. Press the [Format USB Memory] button. The message 'Format Complete' displays when the formatting process is completed.



About the Power Adapter

The included AC power adapter can be used worldwide.

- » Attach the included plug that is compatible with the type of power outlet in your country.
- » For safe operation, use only the included AC power adapter and plug.

GETTING STARTED

E-VAULT WORKSPACES

The E-VAULT module's system has five workspace areas that are accessible via shortcut buttons. These shortcuts enable quick navigation to any system screen and function.




1 KIT WORKSPACE

Press the **KIT** button to open the **Kit Play** screen. The main function of the Kit Play screen is to select kits to play or edit. The metronome is also controlled from this screen. Press the **≡** menu icon to open the **KIT Workspace Menu** screen and access functions for managing kits (Copy, Rename, Delete).



2 INSTRUMENT WORKSPACE

Press the **INST** button to open the **INSTRUMENT Selection** screen. The main function of this screen is to select instruments to play or edit. Press the **≡** menu icon to open the **Instrument Workspace Menu** screen and access functions for managing instruments (Copy, Rename, Delete).

3 TRIGGER WORKSPACE

Press the **TRIG** button to access trigger settings screens for drum and cymbal inputs, as well as HiHat control. Use the Drum-Cymbal selector  to switch between the **Drum Trigger** and **Cymbal Trigger** screens. E-VAULT automatically saves all trigger settings to a 'Trigger Profile'.

4 MIX WORKSPACE

Press the **MIX** button to open the kit mixer screens. Use the Drum-Cymbal selector  to switch between the **MIXER Drums** and **MIXER Cymbals** group views. Press the  mixer icon to access the **Mix Hub** screen and set input-output volume levels and routing. Press the **≡** menu icon to open the **MIX Workspace Menu** and access screens for Multi-Output routing, and FX settings.

5 SYSTEM WORKSPACE

Long press the **[O]** button to open the **SYSTEM Workspace Menu** screen and access screen functions for system settings, MIDI setup, system update, sound library updates, and backups.

Note Chase Input Selection

Some E-VAULT screens feature buttons for selecting drum and cymbal inputs. The note chase function of the KIT, INST, TRIG, and MIX workspaces allows you to select inputs by press-holding the workspace button and then playing a drum or cymbal.



The note chase input selection function is only active while holding the workspace button.

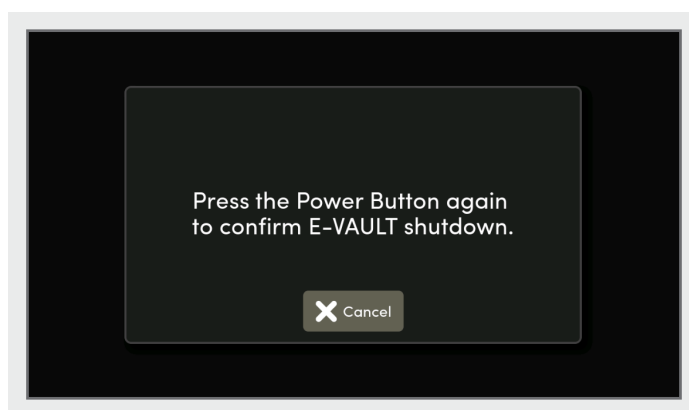
POWER ON/OFF

Turning The Power On

- » Lower the volume of any connected headphones, amplifiers, and speakers.
 - » Press and hold the power button to turn on the module, releasing it when the LED lights up.
 - » The Zildjian E-VAULT logo will appear on the screen to indicate that the system is booting up.
- If drums or cymbals are played during startup, a message will appear. Avoid playing them, as the system is performing calibrations and system checks.

Turning The Power Off

- » Lower the volume of any connected amplifiers and speakers.
- » Press and hold the power button, releasing it when a message appears asking you to confirm E-VAULT shutdown with a second press. Press the power button again.
- » The Zildjian E-VAULT logo and a shutdown message will display.

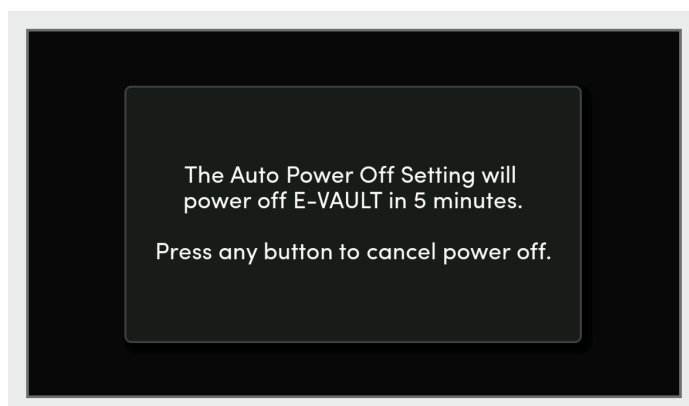


Do not unplug the AC adapter to power off the system; always use the power button to turn off the module.

Auto Power Off

By default, the E-VAULT module will automatically power off after 30 minutes of inactivity.

A system message warning is displayed 5 minutes prior to the auto power off. The auto power off duration can be adjusted in the Control tab of the System Settings screen (p.46).

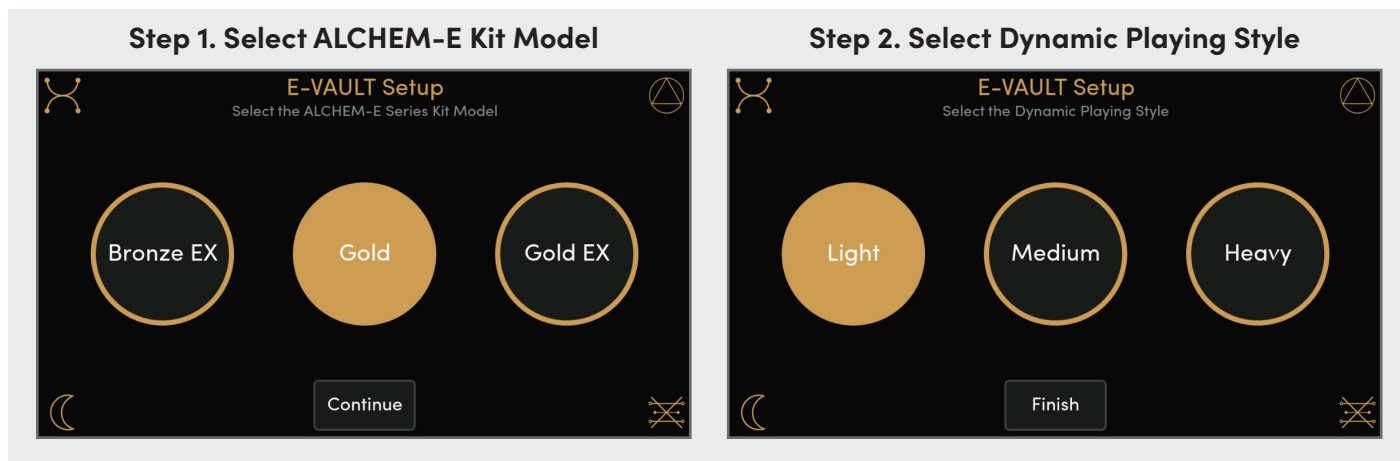


E-VAULT SETUP

Select Kit Model & Playing Style | Initialize Trigger Settings


The E-VAULT Setup process runs the first time the module is powered on, after a full sound library installation, or following a factory reset. This process configures the module with initial trigger settings tailored for your ALCHEM-E kit model.

Follow the onscreen instructions to select your kit model and dynamic playing style.



1. Select the option that matches your ALCHEM-E Kit Model: **Bronze EX**, **Gold**, or **Gold EX**.
2. Press the [Continue] button.
3. Select the trigger settings option that is closest to your dynamic playing style:
Light, **Medium**, or **Heavy**.
4. Press the [Finish] button.

When the E-VAULT setup process is completed, the Kit Play screen displays.

 E-VAULT Setup can be run manually by accessing the System Settings screen's 'Reset' tab and pressing the [E-VAULT Setup] button (p.46). The module will power down and the E-VAULT Setup process will run on the next restart.

Next Steps: Adjust Trigger Settings

The factory trigger settings deliver great out-of-the-box playability. However, it is recommended to complete the three-step HiHat control setup process (p.31) before playing.


ALCHEM-E drums and cymbals offer exceptional trigger sensitivity and dynamic range. For the best experience, adjust the trigger settings for each drum and cymbal input.

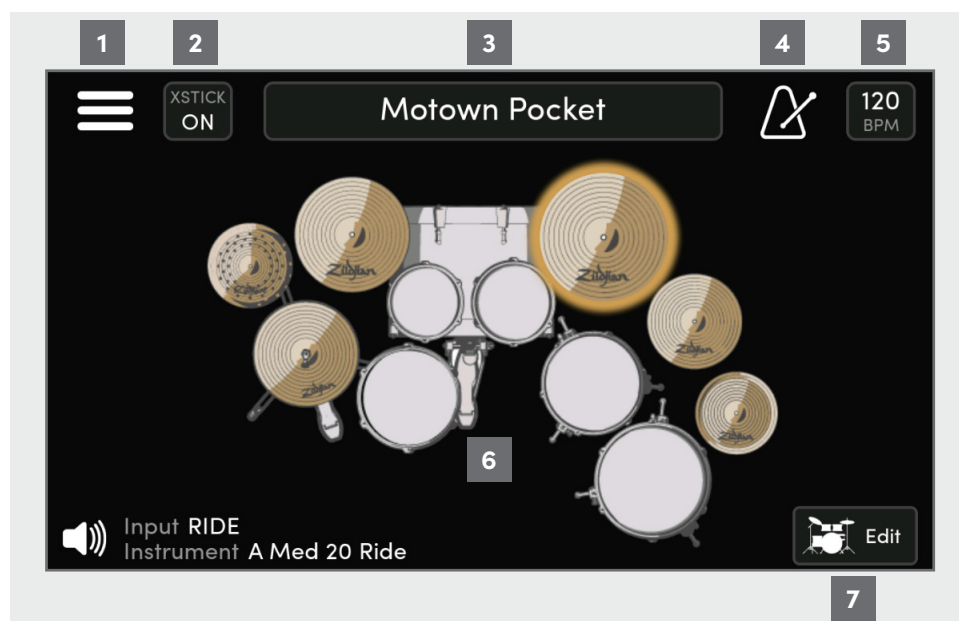
To start dialing in your trigger settings, press the **TRIG** button on the top panel to access the Drum Trigger and Cymbal Trigger screens (p.23).

KIT WORKSPACE

PLAYING KITS

Press the **KIT** button to open the **Kit Play** screen. Use this screen to load kits to play or edit.

- » Select a drum or cymbal on the Kit View to display information on the input and instrument.
- » Press the  menu icon to access the **KIT Workspace Menu** screen (p.15).



1 **KIT Workspace Menu**

2 **XSTICK Button**

3 **Kit Selection Box**

4 **Metronome Control**

5 **BPM | Kit Play Settings**

6 **Kit View**

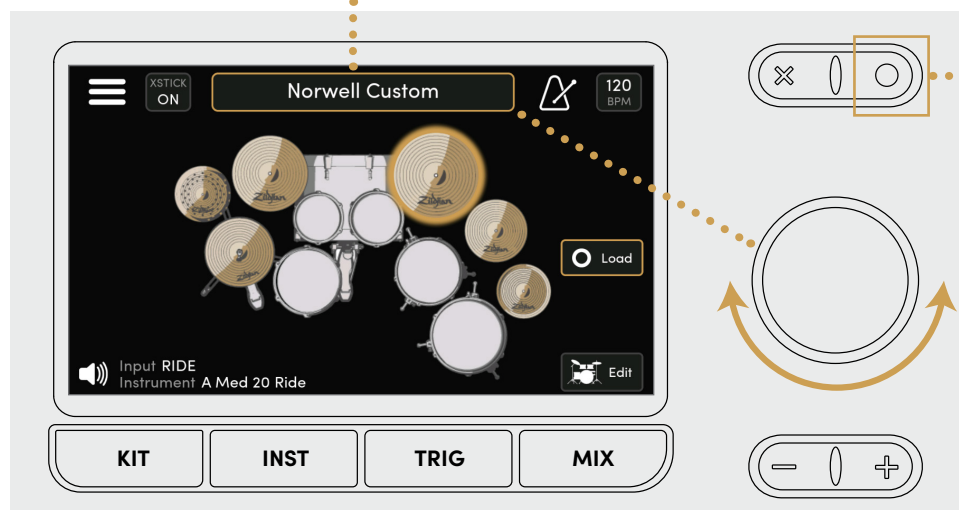
7 **Edit Kit Button**

Select & Load A Kit

- » Turn the encoder to select a kit. The [O] button on the top panel changes color from white to gold, and the [O Load] button is displayed on the screen.
- » Press either button to load the kit. The [O] button flashes during the loading and its color changes back to white when loading is completed.

The **Select Kit** screen is an alternative way of loading a kit. Press the Kit Selection Box to open this screen (p.10).

Press the Kit Selection Box to open the **Select Kit** screen.



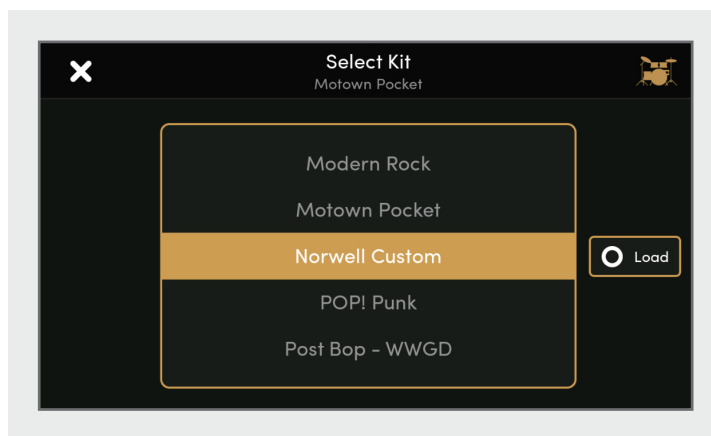
To load the selected kit, press the [O] button on the top panel or the [O Load] button on the screen.

Turn the encoder to select a kit to load. The kit name shown in the Kit Selection box will change.

Select Kit Screen

On the Kit Play screen, press the Kit Selection Box to open the **Select Kit** screen. The selected kit is always highlighted at the center of the list roller.

- » Scroll through the kit list using the touchscreen or by turning the encoder.
- » When a new kit is selected, the [O] button on the top panel changes color from white to gold, and the [O Load] button displays on the screen.
- » Load the selected kit by pressing the [O] button or the [O Load] button onscreen.
- » To close the screen, press the X icon or the [X] button on the module.



Cross-stick Control

The [XSTICK] button is a quick access control for the snare drum's cross-stick triggering function. This is a global setting that is not saved with the kit.

- » Press the [XSTICK] button to switch the snare drum's cross-stick ON/OFF.



The [XSTICK] button controls the **Zone Mode** trigger setting of the SNARE input.

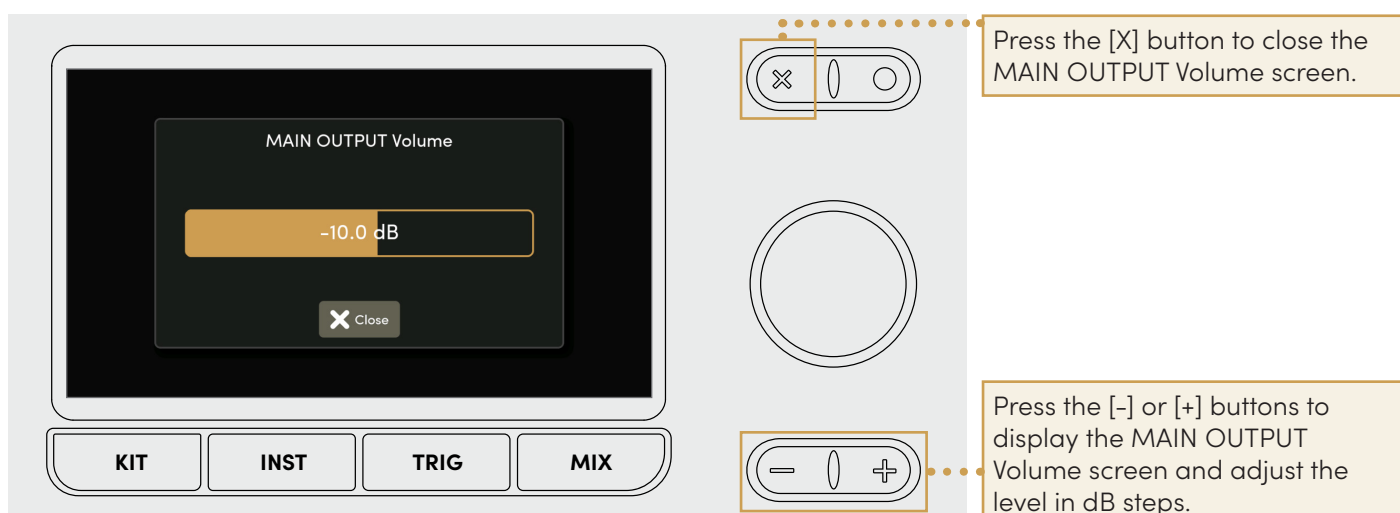
- » If XSTICK = ON, Zone Mode = 3. All SNARE input trigger zones are active.
- » If XSTICK = OFF, Zone Mode = 2. Playing zone C will trigger zone B, so the sound assigned to zone C will not be played.

Refer to the Trigger Settings Overview (p.25) for more information.

Adjust MAIN OUTPUT Volume

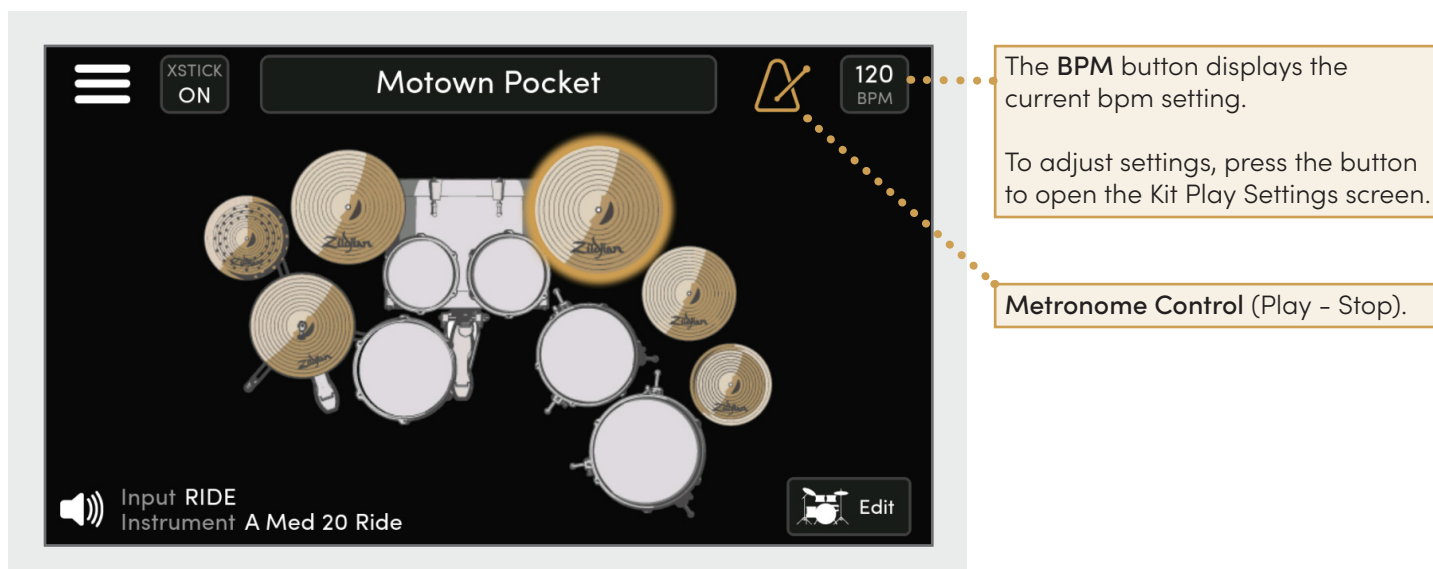
E-VAULT's main output volume level can be adjusted by pressing the [-] | [+] buttons. The main output volume level can also be adjusted on the Mix Hub screen (p.37).

- » On any screen, press either the [-] or [+] button to display the **MAIN OUTPUT Volume** screen.
- » Press the [-] and [+] buttons to adjust the main output volume level in dB steps.
- » To close the screen, press the [X Close] button onscreen, or the [X] button on the module.





METRONOME

The metronome is controlled on the Kit Play screen. To adjust the metronome's settings, press the BPM button to open the Kit Play Settings screen.



Play The Metronome

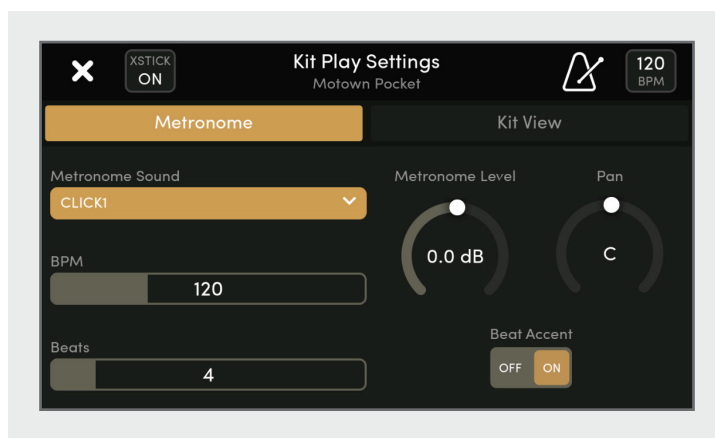
- » Press the  icon to play the metronome. The icon color changes to gold to indicate the metronome is playing.
- » Press the  icon again to stop the metronome. The icon color changes back to white.

Kit Play Settings | Metronome

Press the BPM button to open the Kit Play Settings screen.

The **Metronome** tab is displayed by default.

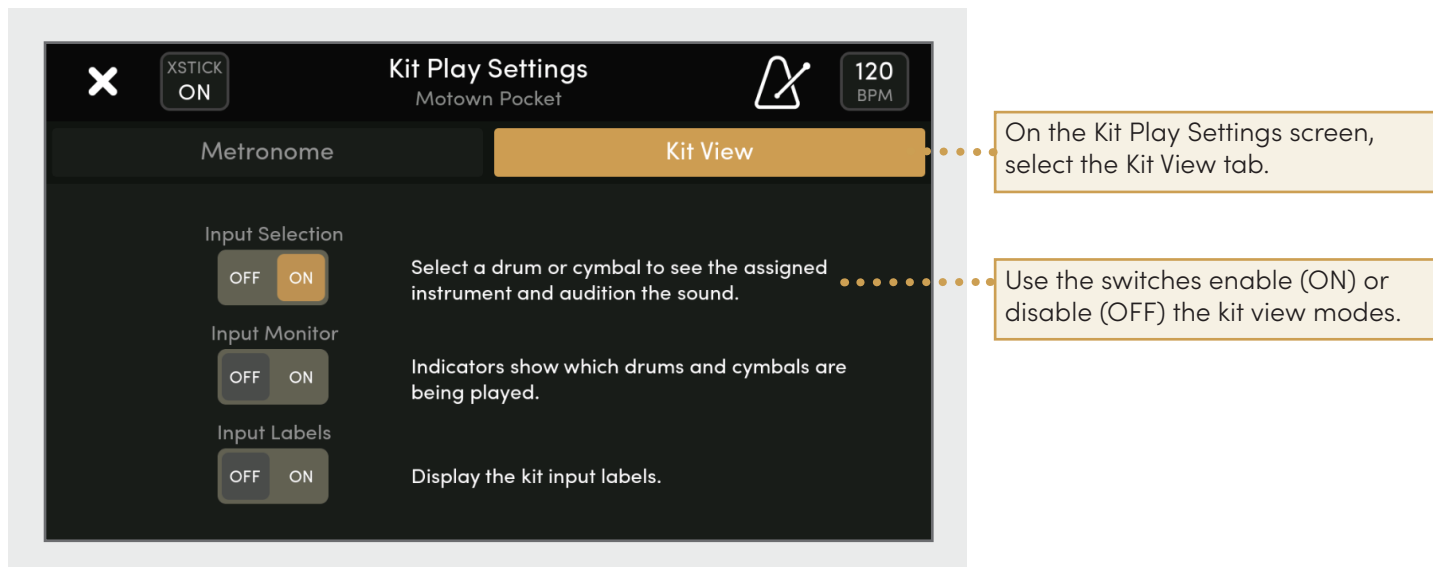
- » Touch a setting to select it.
- » Touch-drag on the setting or use the encoder to adjust the value of BPM, Beats, Metronome Level, and Pan.
- » To close and return to the Kit Play screen, press the X icon on the screen or the [X] button on the module.



Setting	Function	Values
Metronome Sound	Press the dropdown list to select a sound combination for the metronome's accented and unaccented beat.	CLICK1, CLICK2, E.WOOD/METAL, E.CB/HCP, E.HH/SD
BPM	Sets the metronome tempo in beats per minute.	40 to 300 bpm
Beats	Sets the number of beats in a single measure.	2 to 16
Metronome Level	Controls the metronome's volume level (dB). This setting can also be adjusted on the Mix Hub screen.	-99.9 to 10.0dB
Pan	Controls the stereo panning position of the metronome sound.	L63 • C • R63
Beat Accent	When set to ON, a different sound will play on the first (accented) beat of the measure.	OFF, ON

KIT VIEW MODES

The Kit Play screen has three 'Kit View Modes' for visualizing instrument information and triggering. These modes can be used in any combination. To control which kit view modes are active, select the **Kit View** tab on the Kit Play Settings screen.



Kit Play Settings | Kit View

The different kit view modes are enabled (ON) or disabled (OFF) using the switch settings. When E-VAULT is used for the first time, Input Selection mode is enabled by default. Kit view modes are global settings that are saved when the module is powered down.

Input Selection ON

When the Input Selection mode is enabled (ON), each drum or cymbal of the kit view can be pressed to display its input and assigned instrument.

- » Press the icon to preview the instrument.
- » When the [Edit] button is pressed the selected input's tab will be active on the Edit Kit screen.

Input Monitor ON

When the Input Monitor mode is enabled (ON), input triggering is visualized using colored indicators. The indicator color changes in response to dynamics.

Lightest Hit Hardest Hit

Separate zone triggering is not visualized.

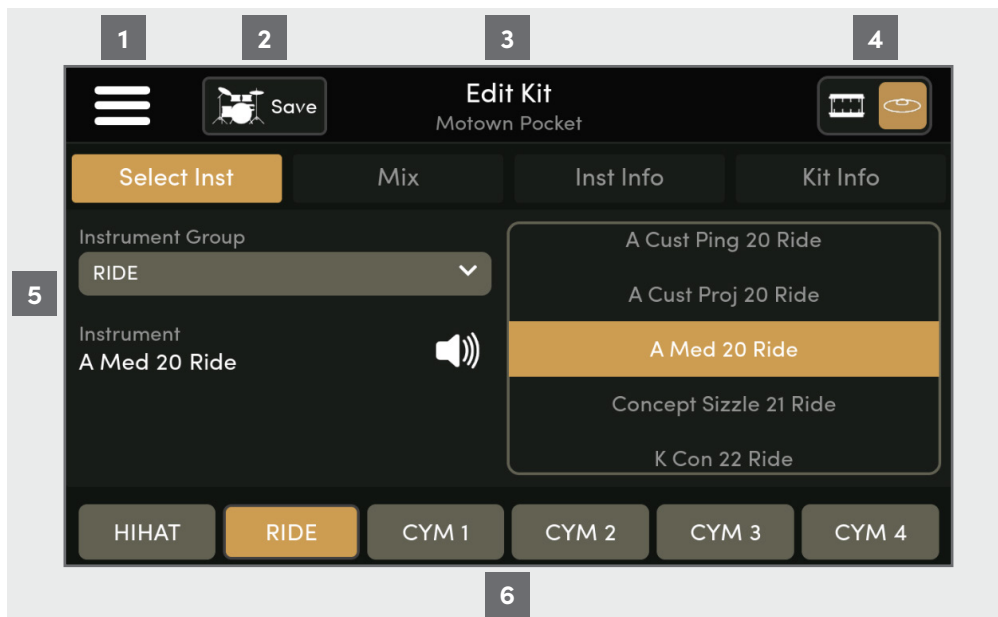
Input Labels ON

When this mode is enabled, trigger input labels are displayed on the kit view.



EDIT KIT

To open the **Edit Kit** screen, press the [Edit] button on the Kit Play screen. The simple layout is designed to support efficient editing tasks, including selecting instruments to assign to kit inputs and adjusting mix levels.



1 Kit Workspace Menu

2 Save Kit Button

3 Screen | Loaded Kit

4 Drum-Cymbal Selector

5 Settings Tabs

6 Kit Input Buttons

Edit & Save A Kit

- » Use the Drum-Cymbal selector to switch between drum and cymbal inputs. The Kit Input buttons change at the bottom of the screen.
- » Press the input button to select the drum or cymbal you want to edit.
- » The selected input's instrument and mix settings instantly load to the tabs.
- » While editing, use the Drum-Cymbal selector and the input buttons to quickly switch between drum and cymbal inputs.
- » Press the [Save] button to save your changes to the kit. The kit save button is also found on the Mix Hub screen (p.37).

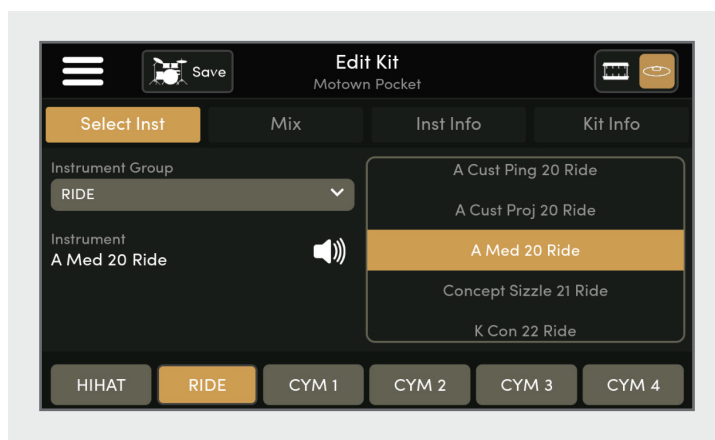


If you attempt to load a new kit while the current kit has unsaved changes, a system message is displayed that prompts you to save or discard the changes.

Edit Kit | Select Inst

Use this tab to select an instrument from an instrument group to assign to the selected kit input.

- » Press **Instrument Group** to open the dropdown list. Selecting a group refreshes the instrument list.
- » Touch-drag on the instrument list or use the encoder to select an instrument to load to the kit input.
- » Press the speaker icon to preview the loaded instrument.



Edit Kit | Mix

Select the Mix tab to adjust the volume level and pan setting of the selected kit input.

The name of the loaded instrument is shown.

- » Select the **Channel Level** or **Pan Level** setting by touching the corresponding arc area.
- » Touch-drag on the setting or use the encoder to adjust the value.

Level and pan settings can also be adjusted using the kit mixer. Press the **MIX** button to open the MIXER screen (p.36).

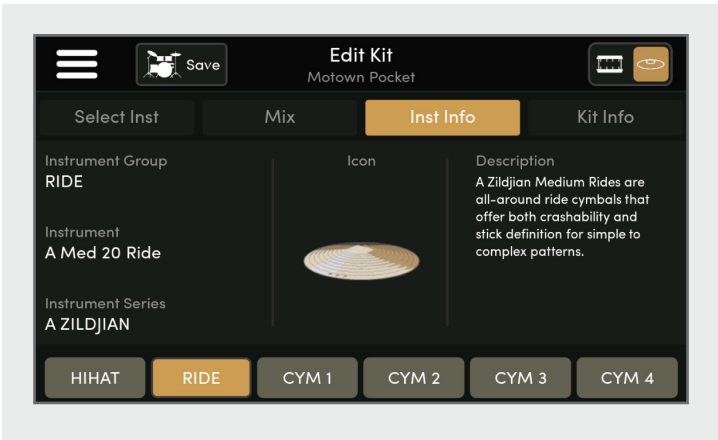


Setting	Function	Values
Mixer Channel Level	Controls the selected input’s volume level (dB).	-99.9 to 10.0dB
Mixer Pan Level	Controls the stereo panning position of the selected input.	L63 • C • R63

Edit Kit | Inst Info

This tab displays information about the instrument loaded to the selected input.

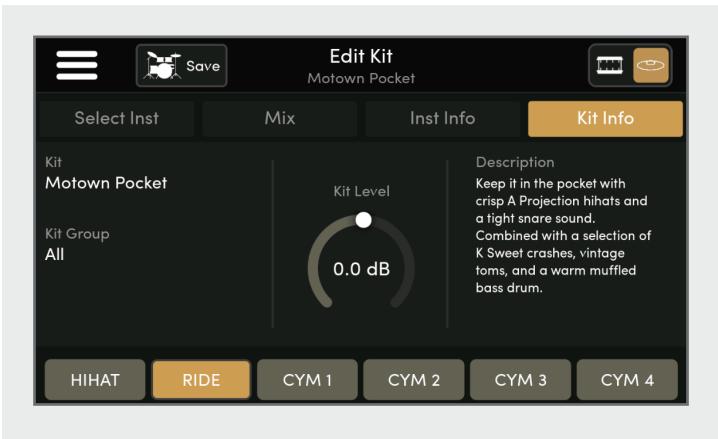
- » Each E-VAULT instrument belongs to an **Instrument Group**.
- » **Instrument Series**: In the case of cymbals the Zildjian cymbal family is displayed.
- » The **Icon** helps to identify the instrument type.
- » The **Description** provides basic details about the acoustic instrument’s sound.



Edit Kit | Kit Info

This tab displays information about the current kit and a control for its volume level.

- » Select the **Kit Level** setting by touching the corresponding arc area.
- » Touch-drag on the Kit Level arc or use the encoder to adjust the value.
- » The **Description** provides basic details about the factory kit and its instruments.

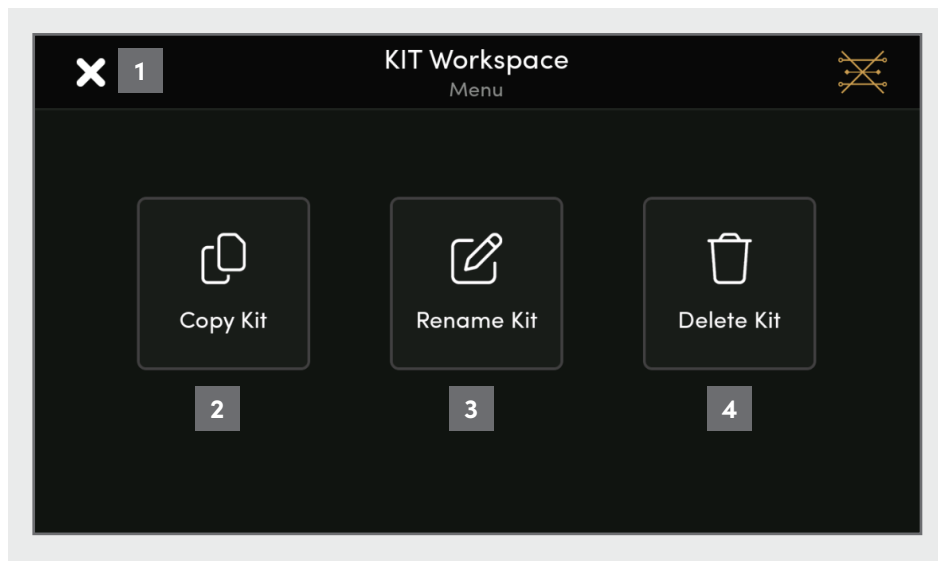


Setting	Function	Values
Kit Level	Controls the kit’s volume level (dB).	-99.9 to 10.0dB

Kit Level can be also be adjusted on the Mix Hub screen (p.37).

KIT WORKSPACE MENU

To open the **KIT Workspace Menu** screen, press the **≡** menu icon on either the Kit Play or Edit Kit screens. The menu displays buttons to access kit management functions (Copy, Rename, Delete). Press a function button to open its corresponding screen.



1 Close Screen Button

2 Copy Kit Button

3 Rename Kit Button

4 Delete Kit Button

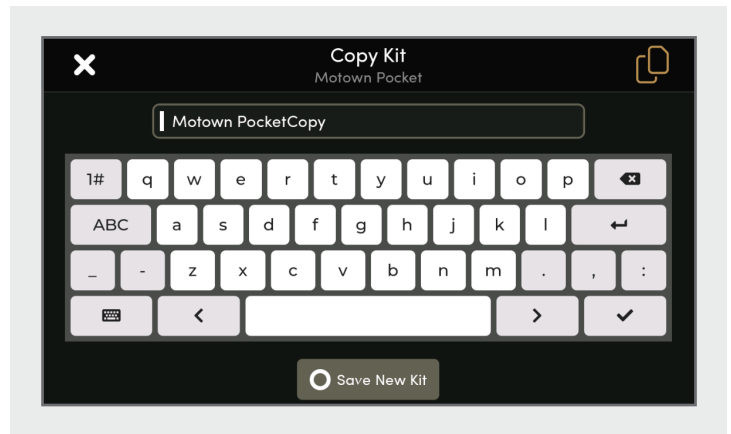
COPY KIT

On the KIT Workspace Menu screen, press the [Copy Kit] button to open the **Copy Kit** screen. The function of the Copy Kit screen is to save a copy of the loaded kit. Copying a factory kit creates a user kit. The name of the copied kit can also be edited before it is saved.

Save A Copied Kit

When the screen opens the text 'Copy' is added to end of kit's name.

- » Select the text area and use the onscreen keyboard to edit the kit name.
- » Press the [O Save New Kit] button onscreen or the [O] button on the module to save the kit and return to the previous screen.
- » Press the X icon or [X] button on the module to close the screen without saving a copy of the kit.



RENAME KIT

On the KIT Workspace Menu screen, press the [Rename Kit] button to open the **Rename Kit** screen. The function of the Rename Kit screen is to rename a user (copied) kit. If an original factory kit is loaded, the rename kit option is not available in the KIT Workspace Menu.

Rename A Kit

- » Select the text area and use the onscreen keyboard to edit the kit name.
- » Press the [O Save Kit] button onscreen or the [O] button on the module to save the kit and return to the previous screen.
- » Press the X icon or [X] button on the module to close the screen without saving the renamed kit.

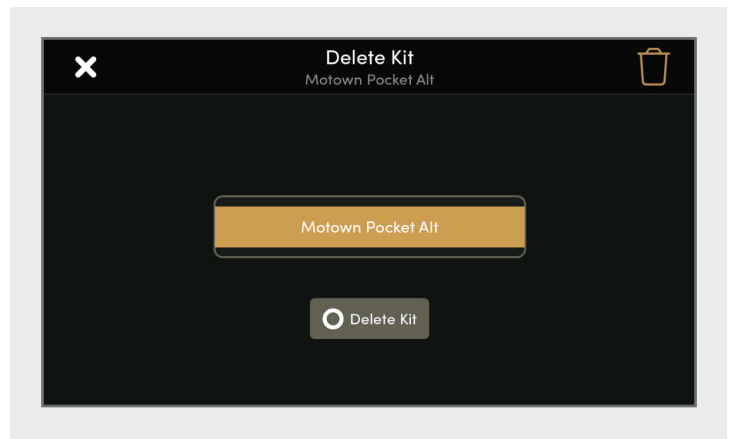


DELETE KIT

On the KIT Workspace Menu screen, press the [Delete Kit] button to open the **Delete Kit** screen. The function of the Delete Kit screen is to delete a user (copied) kit. Original factory kits cannot be deleted and are not listed on this screen.


Delete A Kit

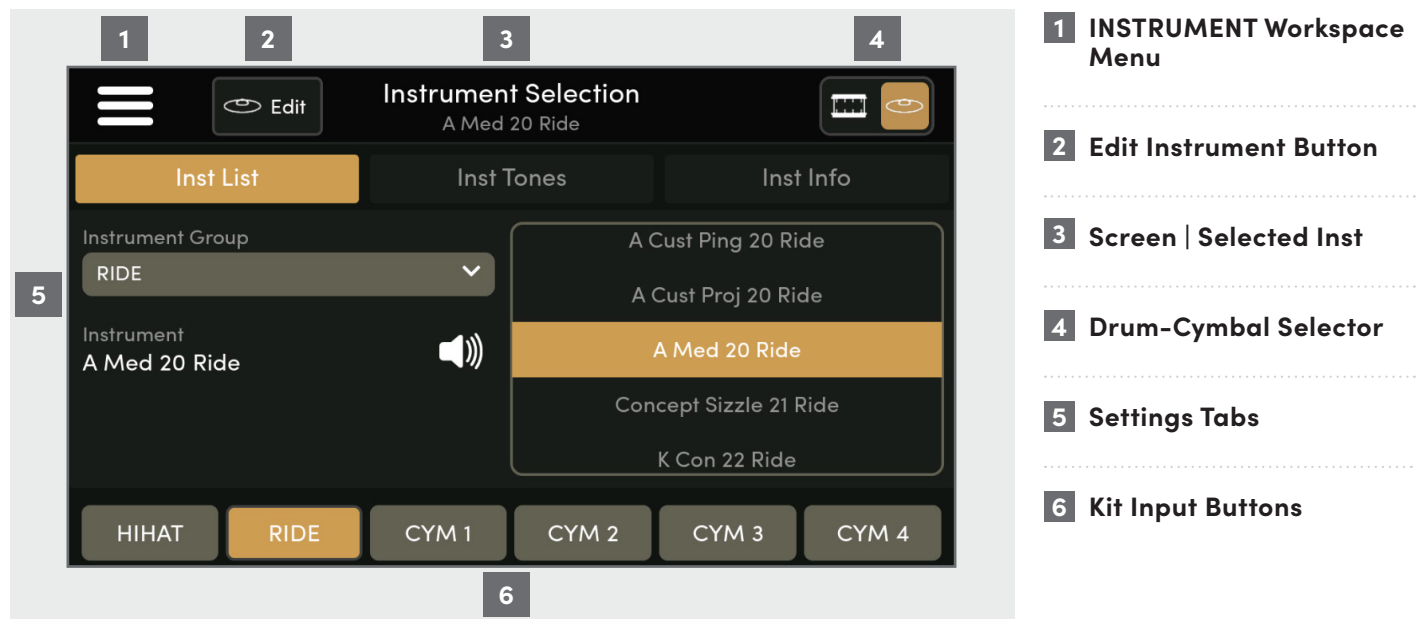
- » Touch and drag the highlighted text area to select a kit from the list of user kits. The encoder can also be used to select a kit.
- » Press the [O Delete Kit] button or the [O] button on the module to delete the kit and return to the previous screen.
- » Press the X icon or [X] button on the module to close the screen without deleting a kit.



INSTRUMENT WORKSPACE



INSTRUMENT SELECTION

Press the **INST** button to open the **Instrument Selection** screen. The main function of this screen is to select instruments for review and editing. To access the **INSTRUMENT Workspace Menu** and screen functions for copying, renaming and deleting instrument data, press the  menu icon.





Instrument Selection | Inst List

The functions of the Instrument Selection screen overlap with those of the Edit Kit screen. Specifically, the instruments assigned to different inputs remain in memory, and can be saved as changes to the current kit on the Edit Kit screen (p.13).

- » Use the Drum-Cymbal selector  to switch between drum and cymbal inputs. Press the input button of the drum or cymbal you want to use for instrument selection.
- » Access the Inst List tab to select an instrument to assign to the selected kit input. The instrument list selection can be controlled by touch or by using the encoder.
- » Press the Instrument Group dropdown list to change the group and filter the instrument list.
- » Press the  icon to preview the instrument.

Edit The Selected Instrument

- » When a drum input is selected, press the [ Edit] button to open the **Edit Instrument** screen.
- » When a cymbal input is selected, press the [ Edit] button to open the **Edit Instrument** screen.

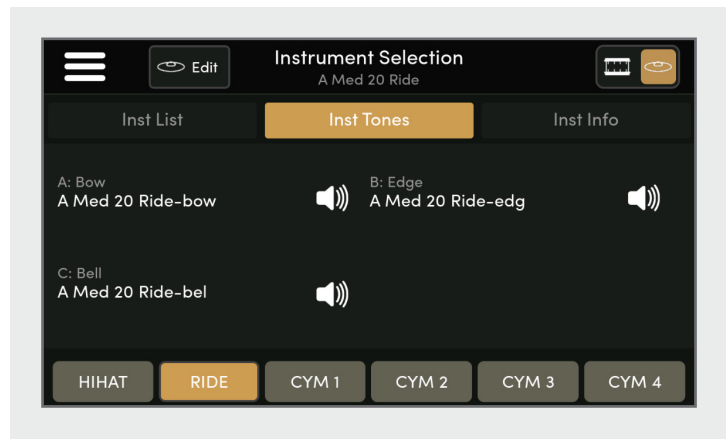


The Edit Instrument icon changes depending on which position the Drum-Cymbal selector is switched to.

Instrument Selection | Inst Tones

The Inst Tones tab displays the tone structure of the selected instrument.

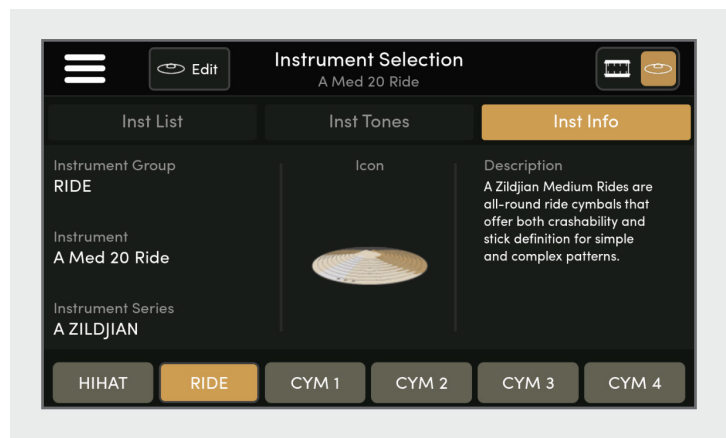
- » The main panel shows the selected input's trigger zones and the names of the instrument tones that are assigned.
- » The example shows the three tones of the A Med 20 Ride instrument are triggered by the RIDE cymbal input's Bow, Edge and Bell zones.
- » Press the 🔊 icon to preview the tone.





Instrument Selection | Inst Info

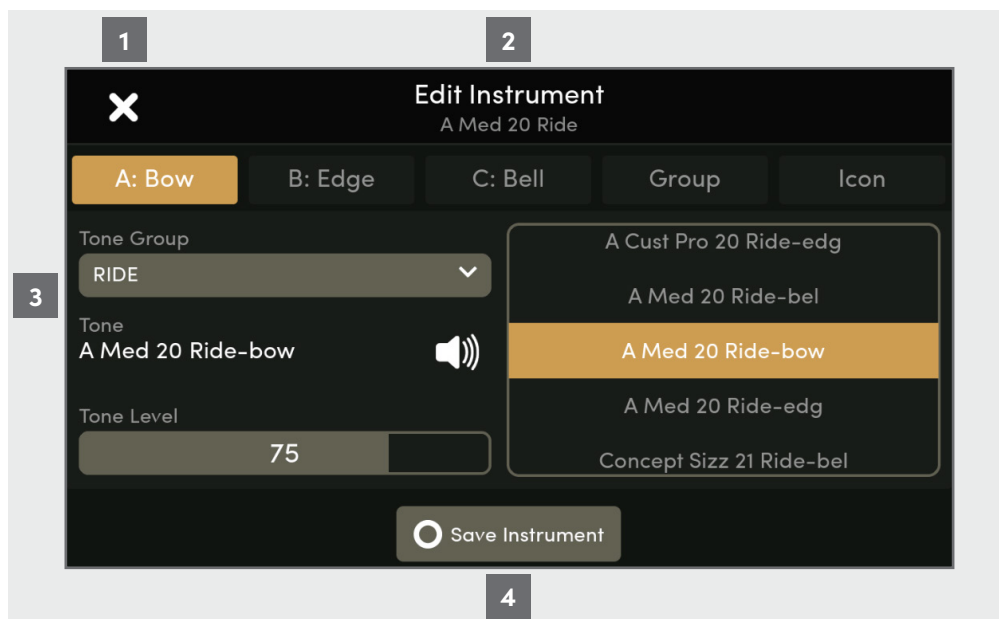
The Inst Info tab displays information about the selected instrument.

- » Every E-VAULT instrument belongs to an **Instrument Group**.
- » **Instrument Series:** For cymbals, the Zildjian cymbal family name is displayed.
- » The **Icon** is a visual representation of the instrument type.
- » **Description:** A summary of acoustic instrument's design and sound.



EDIT INSTRUMENT

To open the **Edit Instrument** screen, press the [ Edit] button or [ Edit] button on the Instrument Selection screen. The screen's simple layout makes it easy to select tones and assign them to instrument zones. The tab zone names change depending on the selected input.



1 Close Button

2 Screen | Selected Inst

3 Settings Tabs

4 Save Instrument Button

Instrument Structure




E-VAULT instruments are structured using “tones” – specific sounds such as a snare drum head or a cymbal bell. The instrument structure assigns the selected tones to trigger zones.

The A, B, C, D trigger zone system is used for all drum and cymbal inputs. However, to support instrument editing tasks, the zone tabs also display the name of the input’s trigger zone.

Zone	KICK	SNARE	TOM 1-4	HIHAT	RIDE/ CYM 1-4
A	Head	Head	Head	Bow	Bow
B	-	Rimshot	Rimshot	Edge	Edge
C	-	XStick	Rim Click	Bell	Bell
D	-	-	-	Foot	-


Creating User Instruments

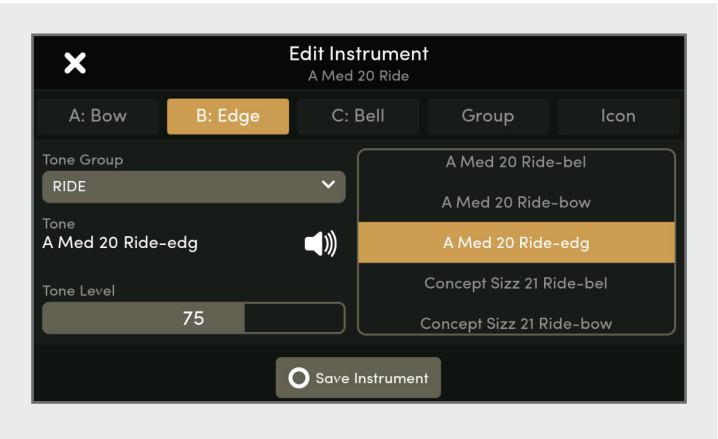
The strategy for creating custom instruments is to first copy a factory instrument and then edit its tone structure.

1. On the Instrument Selection screen, select an input and instrument you would like to copy.
2. Press the  menu icon to open the Instrument Workspace Menu.
3. Press the [Copy Instrument] button to open the Copy Instrument screen. Edit the instrument name and then press the [O Save New Instrument] button to save the new instrument.
4. The Instrument Selection screen displays with the new (copied) instrument selected.
5. Press the [ Edit] or [ Edit] button to open the Edit Instrument screen.
6. On the Edit Instrument screen, switch between the zone tabs and select different tones to assign to the instrument’s zones. The volume levels of the tones can also be adjusted.
7. Press the [O Save Instrument] button to save the instrument and return to the Instrument Selection screen.

Edit Instrument | A, B, C, D Zone Tabs

Use these tabs to select different tones to assign to the instrument’s zones.

- » Select an option from **Tone Group** to refresh the tone list.
- » Touch-drag on the tone list or use the encoder to select and load a tone.
- » Adjust the **Tone Level** to get the right volume balance between tones.
- » Press the  icon to preview the tone.

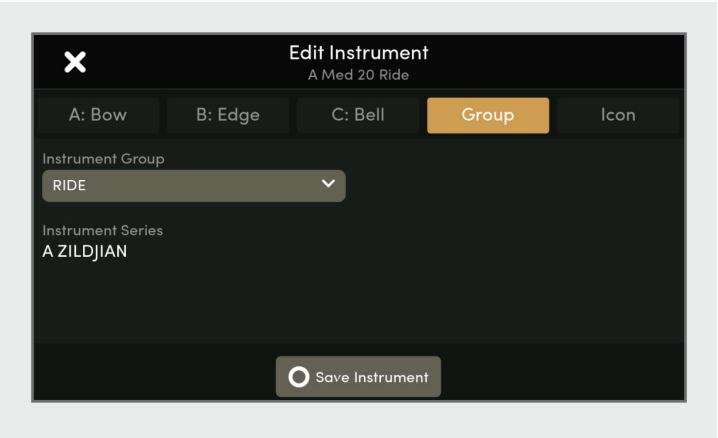


Setting	Function	Values
Tone Level	Controls the instrument tone’s volume level	0 to 100

Edit Instrument | Group

All E-VAULT instruments are organized within instrument groups. Use this tab to select the group to save the instrument to.

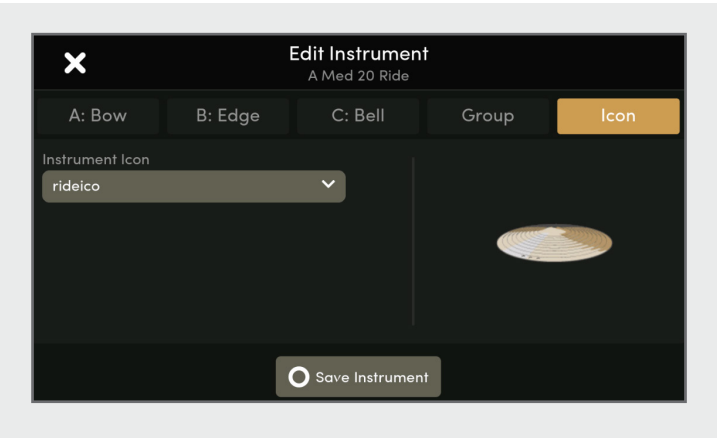
- » Open the **Instrument Group** dropdown list and select the instrument group option.



Edit Instrument | Icon

The instrument icons helps to identify the instrument type. When creating a custom instrument, you may want to change the instrument’s icon that displays in the Edit Kit and Instrument Selection screens.


- » Open the **Instrument Icon** dropdown list and select the icon option. The image will display on the right side of the screen.

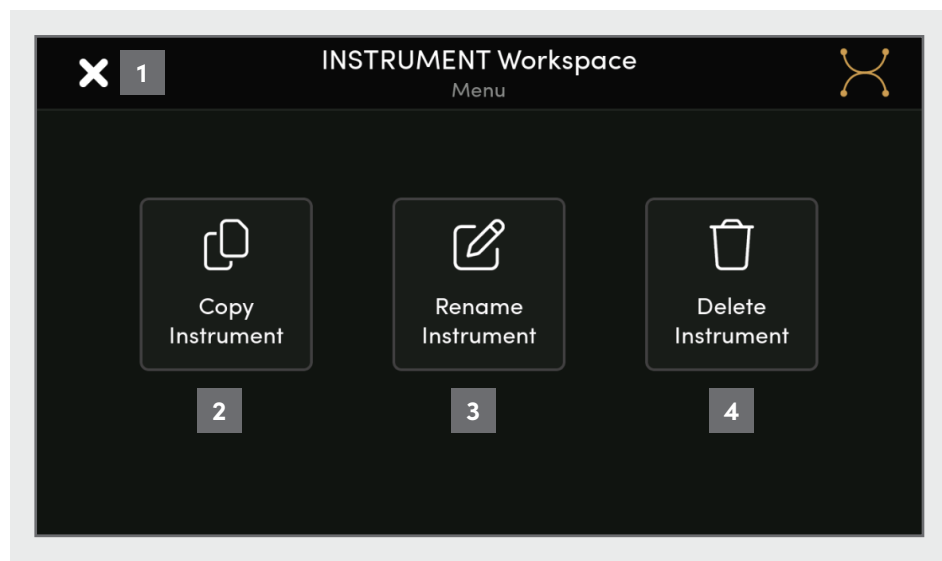


Save The Instrument

When you have finished editing, press the module’s [O] button or the [O Save Instrument] button onscreen to save the instrument and return to the Instrument Selection screen.

INSTRUMENT WORKSPACE MENU

To open the **INSTRUMENT Workspace Menu** screen, press the  menu icon on the Instrument Selection screen. The menu displays buttons to access various instrument management functions (Copy, Rename, Delete). Press a function button to open its corresponding screen.



- 1 Close Screen Button
- 2 Copy Instrument Button
- 3 Rename Instrument Button
- 4 Delete Instrument Button

COPY INSTRUMENT

On the INSTRUMENT Workspace Menu screen, press the [Copy Instrument] button to open the **Copy Instrument** screen.

The function of the copy instrument screen is to save a copy of the selected instrument.

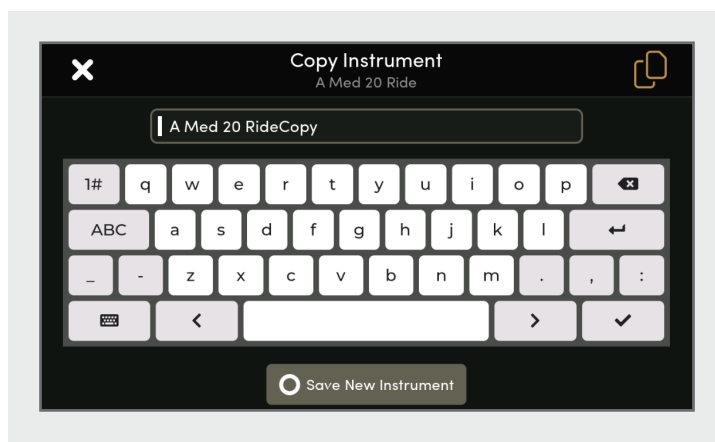
» Copying a factory instrument creates a **User Instrument**.

The name of the copied instrument can also be edited before it is saved.

Save A Copied Instrument

When the screen opens, the text 'Copy' is added to end of the instrument's name.

- » Select the text area and use the onscreen keyboard to edit the instrument name.
- » Press the [O Save New Instrument] button onscreen or the [O] button on the module to save the instrument and return to the Instrument Selection screen.
- » Press the X icon or [X] button on the module to close the screen without saving a copy of the instrument.



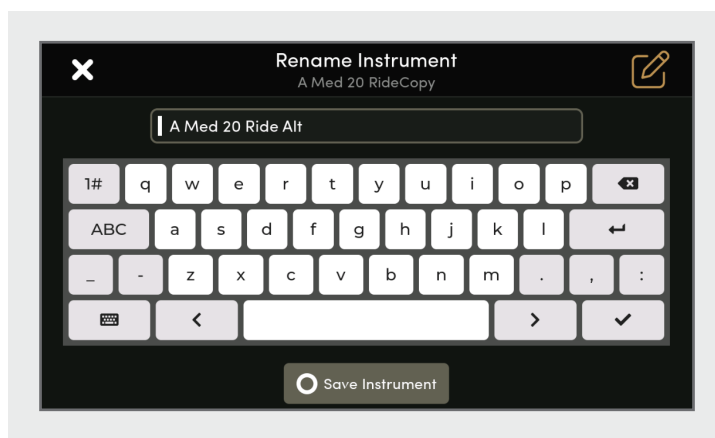
RENAME INSTRUMENT

On the INSTRUMENT Workspace Menu screen, press the [Rename Instrument] button to open the **Rename Instrument** screen.

The function of the rename instrument screen is to rename a user (copied) Instrument. If an original factory instrument is selected, the rename instrument option is not available in the INSTRUMENT Workspace Menu.

Rename An Instrument

- » Select the text area and use the onscreen keyboard to edit the instrument name.
- » Press the [O Save Instrument] button onscreen or the [O] button on the module to save the instrument and return to the Instrument Selection screen.
- » Press the X icon or [X] button on the module to close the screen without saving the instrument.



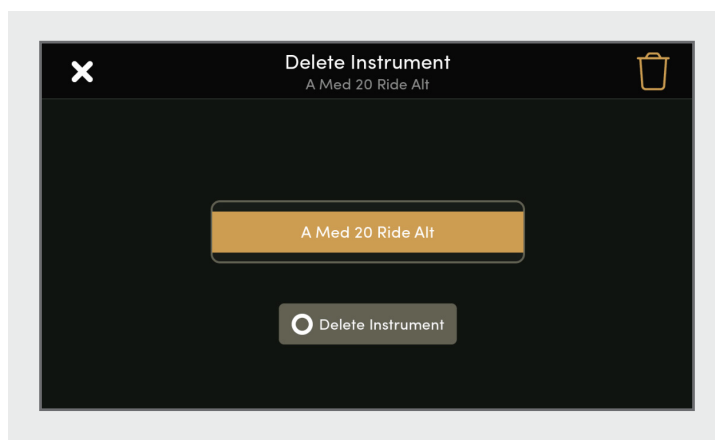
DELETE INSTRUMENT

On the INSTRUMENT Workspace Menu screen, press the [Delete Instrument] button to open the **Delete Instrument** screen.

The function of the delete instrument screen is to delete a user instrument. Original factory instruments cannot be deleted and are not listed on this screen.

Delete An Instrument

- » Touch and drag the highlighted text area to select a user instrument from the list. The encoder can also be turned to select an instrument.
- » Press the [O Delete Instrument] button onscreen or the [O] button on the module to delete the instrument and return to the previous screen.
- » Press the X icon or [X] button on the module to close the screen without deleting an instrument.



TRIGGER WORKSPACE

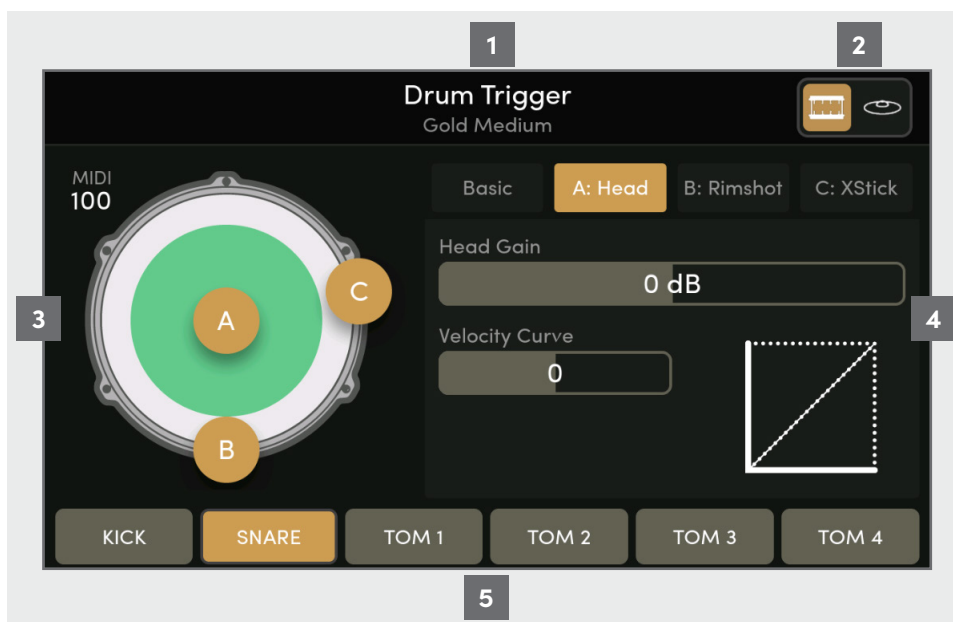
The E-VAULT Setup process (p.8) runs the first time the module is powered on, after a full sound library installation, or following a factory reset. This process configures the module with initial trigger settings tailored for your ALCHEM-E kit model.

The factory trigger settings deliver great out-of-the-box playability, but to get the best experience, it is recommended to adjust the trigger settings of each drum and cymbal input.

The information in this section is designed to help you dial in trigger settings across the whole kit that fit your dynamic playing style.

DRUM | CYMBAL TRIGGER SCREENS

Press the **TRIG** button to access the Trigger Workspace. Use the Drum-Cymbal selector  to switch between the **Drum Trigger** and **Cymbal Trigger** screens.



- 1 Screen | Profile Name
- 2 Drum-Cymbal Selector
- 3 Trigger Indicators
- 4 Trigger Settings Tabs
- 5 Kit Input Buttons

Selecting Inputs

When the Drum-Cymbal Selector is used to switch between the Drum Trigger and Cymbal Trigger screens, the kit input buttons also change at the bottom of the screen.

How To Edit The Trigger Settings

- » Select the input button of the drum or cymbal that you want to edit.
- » The selected input's trigger settings instantly load to the tabs, and the trigger indicators on the left of the screen will respond to playing on that input.
- » Use the Drum-Cymbal selector and the input buttons to quickly switch between the trigger settings of each drum and cymbal.

Saving Trigger Settings

E-VAULT automatically saves the trigger settings of all inputs to a data structure called a **Trigger Profile**.



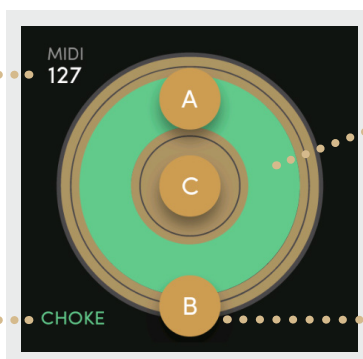
Changes to the trigger profile are saved when the module is powered down and restored when the module is powered on. The trigger profile is also saved as part of a system backup. E-VAULT's backup function is accessed from the SYSTEM Workspace Menu. Backups are an effective way to save and load different trigger profiles.

TRIGGER INDICATORS

The Trigger Indicators are displayed on the left side of the Drum and Cymbal Trigger screens.

MIDI: The MIDI velocity value of the last hit is displayed.

CHOKE: The text 'CHOKE' is displayed when a cymbal is choked.




Trigger Zone Indicator: The indicator color changes to indicate the MIDI velocity of the hit.

Zone Indicator Buttons: Press the zone buttons to turn the indicators ON/OFF.

Trigger Indicators | Input Type

The trigger indicator design for each zone changes depending on the selected input.

The color of the indicator corresponds to the strength of the hit (MIDI Velocity).

Lightest Hit  Hardest Hit

Input Type	Zone A	Zone B	Zone C
KICK	Head (MIDI 100)		
SNARE	Head (MIDI 100)	Rimshot (MIDI 100)	XStick (MIDI 100)
TOMS	Head (MIDI 127)	Rimshot (MIDI 127)	Rimclick (MIDI 127)
CYMBALS	Bow (MIDI 127)	Edge (MIDI 127)	Bell (MIDI 127)

TRIGGER SETTINGS OVERVIEW

The drum and cymbal inputs use trigger settings with similar functionalities. The table below offers an overview of these general functions. For a detailed breakdown of settings by input type, please refer to the trigger settings tables in this guide.

Preset

ALCHEM-E drums and cymbals have specific presets designed to optimize trigger response. The E-VAULT Setup process loads a trigger profile that sets the input presets for your kit model. Unused inputs will remain without a preset selection. When expanding your kit, assign the correct input preset for the connected drum or cymbal.

Threshold (dB)

The threshold level is a common setting applied to all trigger zones of the selected input. Signals below the threshold level are ignored, while signals above it result in triggering. The input's threshold therefore determines the minimum point at which a trigger input is recognized.

Zone Mode

The zone mode settings offers flexible control over zone triggering, which can be useful when triggering external sound sources via MIDI. Depending on the input selected, there are some differences to the function of zone mode settings:

Zone Mode Setting	SNARE TOM 1-4	HIHAT RIDE CYM 1-4
OFF	Input Triggering is disabled	
1 ZONE	Zone A is active. If zone B, C are hit, then zone A will trigger	Zone A, B are active. If zone C is hit, then zone A will trigger
2 ZONE	Zone A, B are active. If zone C is hit, then zone B will trigger	Zone A, B are active. If zone C is hit, then zone A will trigger
3 ZONE	Zone, A, B, C are independently active. This is the default setting.	

The KICK input has only 1 trigger zone (A).

Mask Time

Mask time refers to the brief period during which a triggering signal is ignored after a note is played. This prevents the module from registering additional hits too closely together, helping to avoid false triggers and ensuring that only intentional strikes are detected. The mask time is crucial for maintaining accurate performance and response, especially during fast playing.

Zone Gain (dB)




An input zone's dynamic trigger response reflects the interaction of three settings: Threshold, Zone Gain, and Velocity Curve. Gain is used to set the maximum point of the trigger dynamic range for the input zone. Gain should be adjusted so the player can just reach peak triggering with their strongest hits (MIDI = 127).

Settings table continues on the next page

TRIGGER SETTINGS OVERVIEW

Velocity Curve

If Threshold and Zone Gain can be said to define the minimum and maximum points of a trigger zone's dynamic range, then the Velocity Curve setting controls how played dynamics map to the trigger response within that range. E-VAULT offers a range of curve settings to meet the player's needs. A simple graphic representation of the curve shows the relationship between player input (x-Axis) and triggering response (y-axis).

Velocity Curve Setting	Curve (Line Type)	Application
-1 to -10	Exponential (A Curve) 	An exponential curve setting can counteract the effect of a hard-hitting player consistently "clipping" the trigger response. Setting an exponential curve will make it a little more difficult to achieve medium and high dynamic levels.
0	Linear (B Curve) 	A 1-to-1 mapping between played dynamics and dynamic trigger response. In many cases, a linear setting will work perfectly well and will feel natural.
1 to 10	Log (C Curve) 	A Log Curve setting will help the player achieve a greater trigger response with less hitting force. If the player tends to play very lightly, a Log Curve setting can help the player trigger at medium and high dynamic levels.

Zone Detection Sensitivity

Detection sensitivity settings are adjusted to achieve an optimal balance of trigger response across different zones. The aim is to set the detection sensitivity at a level where the zone is triggered consistently.

- If triggering a zone is difficult or inconsistent, try increasing the detection sensitivity.
- If the zone triggers too easily or unintentionally, decrease the sensitivity.

The drums' default detection sensitivity settings are generally effective for players that have mastered a consistent technique for playing the head, rimshot, and cross stick/rim click.

For cymbals, individual playing styles result in greater variation of triggering responses, so more time may be needed to dial in the optimum detection sensitivity settings.

Choke Sensitivity

The cymbal choke function is based on your touch and the electrical capacitance of your body. The system is very sensitive. If you feel your touch is not consistently triggering the choke, increase the sensitivity value.

Note that the proximity of other metal objects such as cymbal stands can affect the choke, so you may need to decrease the sensitivity value in that situation.

Choke Delay Time

The delay time controls when the system begins to mute the sound after the choke touch is detected. Shorter delay times result in immediate muting when the cymbal is choked. The default values may not suit all players, so the choke delay time value can be adjusted so the sound mute response to the choke gesture feels natural for the player. Some additional hard-coded aspects of the choke function are linked to the delay time setting and are designed to simulate a natural-sounding choke.

Example Setting -300ms:

The mute envelope will engage after 300ms. The envelope's decay is a short, fixed value. The decay is the same for all negative values.

Example Setting +300ms:

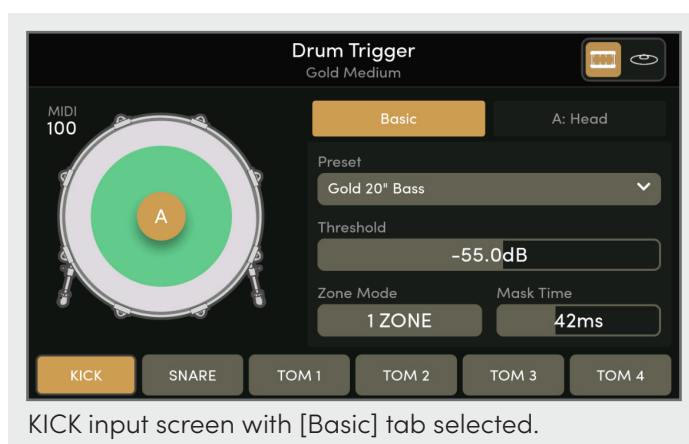
The mute function will engage after 300ms, but if you release your choke in under 300ms, the decay time is set slightly longer to simulate a quick and loose choke that does not strongly mute the sound - a natural response. But, if you release your choke after 300ms, then the decay is fixed and short to simulate a tightly held choke.

KICK TRIGGER SETTINGS

Access the Drum Trigger screen and select the [KICK] button to display the KICK input's trigger indicator and settings tabs.

The KICK input has one zone (A: Head) for trigger setting adjustment.

Press the (A) button on the trigger indicator to switch the graphic indicator on-off. Setting zone mode to 'OFF' also turns off the indicator.



KICK Trigger Settings Tabs

The table outlines the functions of the settings organized by tab.

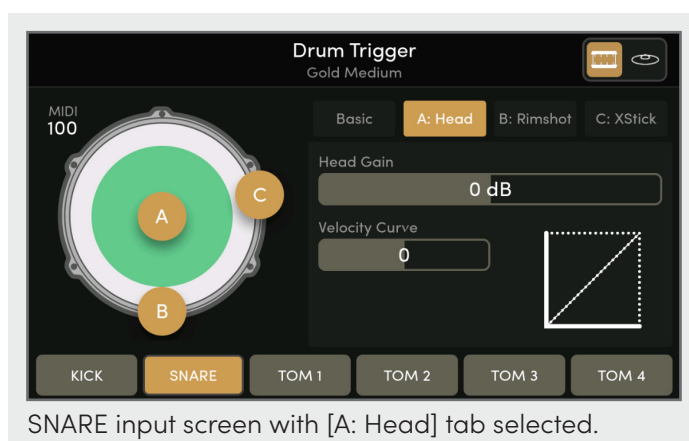
Tab	Setting	Function	Values
Basic	Preset	The trigger preset should match the bass drum model connected to the input. This is set automatically during the E-VAULT Setup process.	No Assign Bronze 18" Bass, Gold 18" Bass, Gold 20" Bass
	Threshold	Set the threshold level to determine the minimum point of triggering for the KICK input.	-96.0 to -20.0 dB
	Zone Mode	Toggle this setting to enable or disable kick triggering.	OFF, 1 ZONE
	Mask Time	Sets the minimum time interval between triggers. If you encounter mis-triggering, consider increasing the mask time settings slightly.	10 to 100 ms
A: Head	Head Gain	Set the gain level so that maximum dynamics are achieved for a strong kick.	-24.0 to 24.0 dB
	Velocity Curve	Adjust the Velocity Curve in combination with Head Gain to achieve natural dynamic response.	-10 to 10

SNARE TRIGGER SETTINGS

Access the Drum Trigger screen and select the **[SNARE]** button to display the SNARE input's trigger indicators and settings tabs.

The SNARE input has three zones (A: Head, B: Rimshot, C: XStick) for trigger setting adjustment.

Press the (A, B, C) buttons on the trigger indicator to switch the graphic indicators on-off. Adjusting zone mode also turns certain indicators on and off.



SNARE Trigger Settings Tabs

The table outlines the functions of the settings organized by tab.

Tab	Setting	Function	Values
Basic	Preset	The trigger preset should match the drum model connected to the input. This is set automatically during the E-VAULT Setup process.	See 'Preset List'
	Threshold	Set the threshold level to determine the minimum point of triggering for the SNARE input.	-96.0 to -20.0 dB
	Zone Mode	This setting controls how different zones are triggered in response to playing. Triggering can also be disabled (OFF).	See p.25 'Zone Mode'
	Mask Time	Sets the minimum time interval between triggers.	10 to 100 ms
A: Head	Head Gain	Set the gain level so that maximum dynamics are achieved for a strong head hit.	-24.0 to 24.0 dB
	Velocity Curve	Adjust the Velocity Curve in combination with Head Gain to achieve natural dynamic response.	-10 to 10
B: Rimshot	Rimshot Detection Sensitivity	Adjust the detection sensitivity so that snare drum rimshot hits consistently trigger zone B (Rimshot).	0 to 100
	Rimshot Gain	Set the gain level so that maximum dynamics are achieved for a strong rimshot hit.	-24.0 to 24.0 dB
	Velocity Curve	Adjust the Velocity Curve in combination with Rimshot Gain to achieve natural dynamic response.	-10 to 10
C: XStick	XStick Detection Sensitivity	Adjust the detection sensitivity so that snare drum cross-stick hits consistently trigger zone C (XStick).	0 to 100
	XStick Gain	Set the gain level so that maximum dynamics are achieved for a strong cross-stick hit.	-24.0 to 24.0 dB
	Velocity Curve	Adjust the Velocity Curve in combination with XStick Gain to achieve natural dynamic response.	-10 to 10

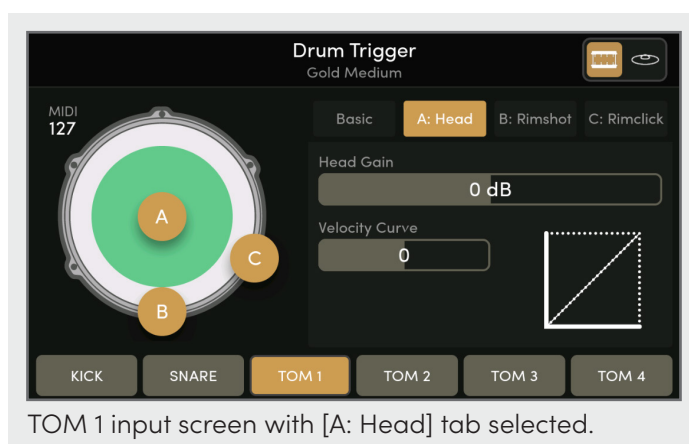
Preset List: No Assign, Bronze 14" Snare, Bronze 10" Tom, Bronze 12" Tom, Gold 14" Snare, Gold 10" Tom, Gold 12" Tom, Gold 14" Tom.

TOM 1-4 TRIGGER SETTINGS

Access the Drum Trigger screen and select one of the TOM buttons to display its trigger indicators and settings tabs.

Each TOM input has three zones (A: Head, B: Rimshot, C: Rimclick) for trigger setting adjustment.

Press the (A, B, C) buttons on the trigger indicator to switch the graphic indicators on-off. Adjusting zone mode also turns certain indicators on and off.



TOM 1 -4 Trigger Settings Tabs

The table outlines the functions of the settings organized by tab.

Tab	Setting	Function	Values
Basic	Preset	The trigger preset should match the drum model connected to the input. This is set automatically during the E-VAULT Setup process.	See 'Preset List'
	Threshold	Set the threshold level to determine the minimum point of triggering for the selected tom input.	-96.0 to -20.0 dB
	Zone Mode	This setting controls how different zones are triggered in response to playing. Triggering can also be disabled (OFF).	See p.25 'Zone Mode'
	Mask Time	Sets the minimum time interval between triggers.	10 to 100 ms
A: Head	Head Gain	Set the gain level so that maximum dynamics are achieved for a strong head hit.	-24.0 to 24.0 dB
	Velocity Curve	Adjust the Velocity Curve in combination with Head Gain to achieve natural dynamic response.	-10 to 10
B: Rimshot	Rimshot Detection Sensitivity	Adjust the detection sensitivity so that tom rimshot hits consistently trigger zone B (Rimshot).	0 to 100
	Rimshot Gain	Set the gain level so that maximum dynamics are achieved for a strong rimshot hit.	-24.0 to 24.0 dB
	Velocity Curve	Adjust the Velocity Curve in combination with Rimshot Gain to achieve natural dynamic response.	-10 to 10
C: Rimclick	Rim Click Detection Sensitivity	Adjust the detection sensitivity so that tom rim hits consistently trigger zone C (Rimclick).	0 to 100
	Rim Click Gain	Set the gain level so that maximum dynamics are achieved for a strong tom rim hit.	-24.0 to 24.0 dB
	Velocity Curve	Adjust the Velocity Curve in combination with Rim Click Gain to achieve natural dynamic response.	-10 to 10

Preset List: No Assign, Bronze 14" Snare, Bronze 10" Tom, Bronze 12" Tom, Gold 14" Snare, Gold 10" Tom, Gold 12" Tom, Gold 14" Tom.

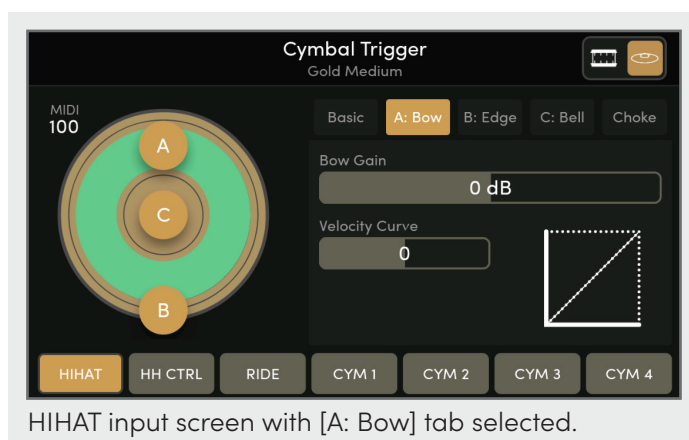
HIHAT TRIGGER SETTINGS

The settings described in this section apply to the HIHAT input. Settings for HiHat control and 'D' zone foot sounds (chick, splash), are adjusted on the HiHat control screen [HH CTRL] – see p.31.

Access the Cymbal Trigger screen and select the **[HIHAT]** button to display the input's trigger indicators and settings tabs.

The HIHAT input has three zones (A: Bow, B: Edge, C: Bell) for trigger setting adjustment.

Press the (A, B, C) buttons on the trigger indicator to switch the graphic indicators on-off. Adjusting zone mode also turns certain indicators on and off.



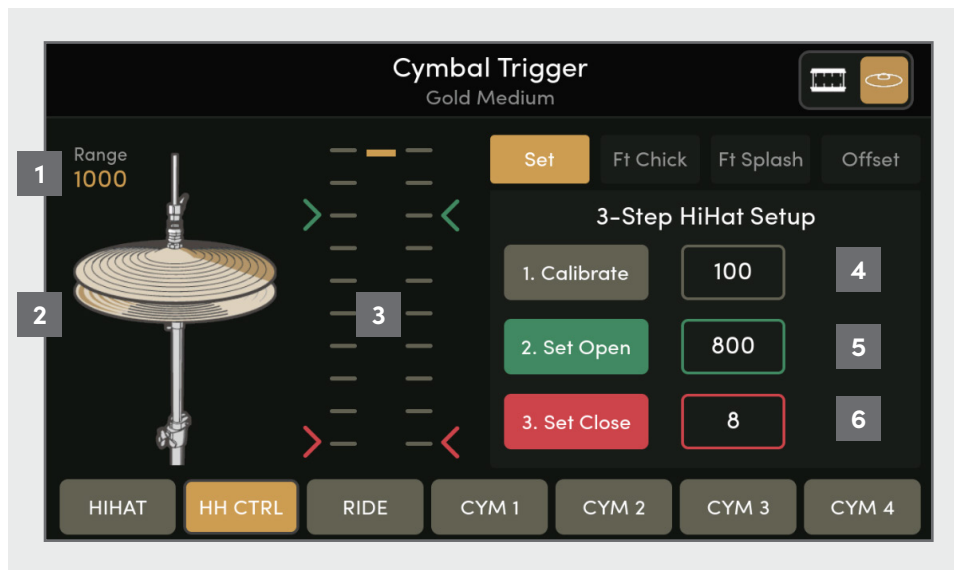
HIHAT Trigger Settings

The table outlines the functions of the settings organized by tab.

Tab	Setting	Function	Values
Basic	Preset	For the HIHAT input the preset options are preconfigured. It is only possible to assign the E-Family 14" HiHat to this input.	No Assign, E-Family 14" HiHat
	Threshold	Set the threshold level to determine the minimum point of triggering for the HiHat input.	-96.0 to -20.0 dB
	Zone Mode	This setting controls how different zones are triggered in response to playing. Triggering can also be disabled (OFF).	See p.25 'Zone Mode'
	Mask Time	Sets the minimum time interval between triggers.	10 to 100 ms
A: Bow	Bow Gain	Set the gain level so that maximum dynamics are achieved for a strong bow hit.	-24.0 to 24.0 dB
	Velocity Curve	Adjust the Velocity Curve in combination with Bow Gain to achieve natural dynamic response.	-10 to 10
B: Edge	Edge Detection Sensitivity	Adjust the detection sensitivity so that HiHat edge hits consistently trigger zone B (Edge).	0 to 100
	Edge Gain	Set the gain level so that maximum dynamics are achieved for a strong edge hit.	-24.0 to 24.0 dB
	Velocity Curve	Adjust the Velocity Curve in combination with Edge Gain to achieve natural dynamic response.	-10 to 10
C: Bell	Bell Detection Sensitivity	Adjust the detection sensitivity so that HiHat bell hits consistently trigger zone C (Bell).	0 to 100
	Bell Gain	Set the gain level so that maximum dynamics are achieved for a strong bell hit.	-24.0 to 24.0 dB
	Velocity Curve	Adjust the Velocity Curve in combination with Bell Gain to achieve natural dynamic response.	-10 to 10
Choke	This tab is blank. Choke settings do not apply to the HiHat.		

HIHAT CONTROL SETUP

To set up the E-FAMILY HiHat, access the Cymbal Trigger screen and press the [HH CTRL] button. The [Set] tab displays the three step buttons used in setting up HiHat control.



1 HiHat CTRL Range Value

2 HiHat Graphic

3 HiHat CTRL Scale Bar

4 Calibrate Button

5 Set Open Button

6 Set Close Button

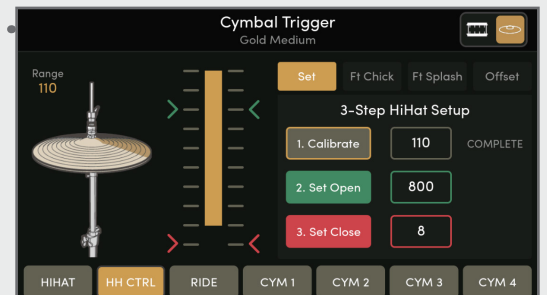
HiHat Control

The scale bar and range value combine to indicate the position of the top HiHat cymbal relative to the bottom cymbal. After setting, the HiHat graphic animates the open-close movement.

To set up the open-close control function of the HiHat, follow the instructions below for each step:

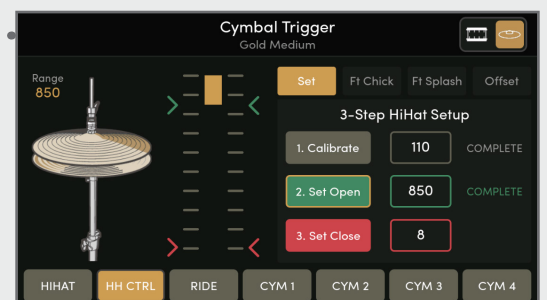
Step 1: Calibrate

1. Loosen the HiHat clutch and allow the top cymbal to rest on the bottom cymbal. The player's foot should not touch the HiHat pedal.
2. Press the [1. Calibrate] button to set the calibrate point. The message "COMPLETE" shows next to the button when the step is done.



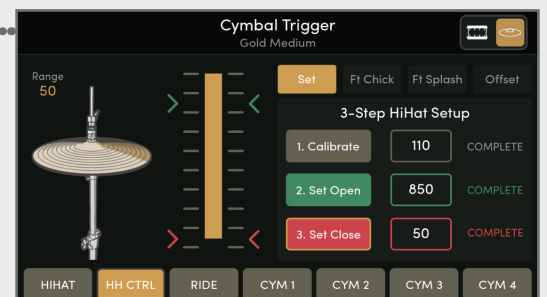
Step 2: Set Open Point

3. Lift the top cymbal to the desired height and lock the HiHat clutch. You should see the indicator bar and range value start to change.
4. Press the [2. Set Open] button. The open point is set and shown on the scale. The message "COMPLETE" shows next to the button when the step is done.



Step 3: Set Close Point

5. Close the HiHat with natural foot pressure.
6. Press the [3. Set Close] button when the range value is lower than the calibrate and set open point values. The close point is set and shown on the scale. The message "COMPLETE" shows next to the button when the step is done.



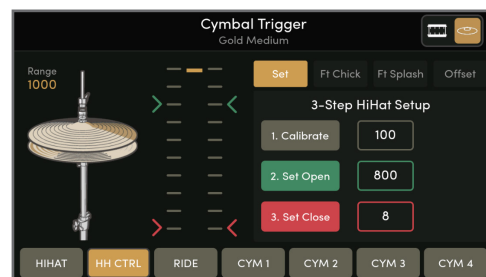
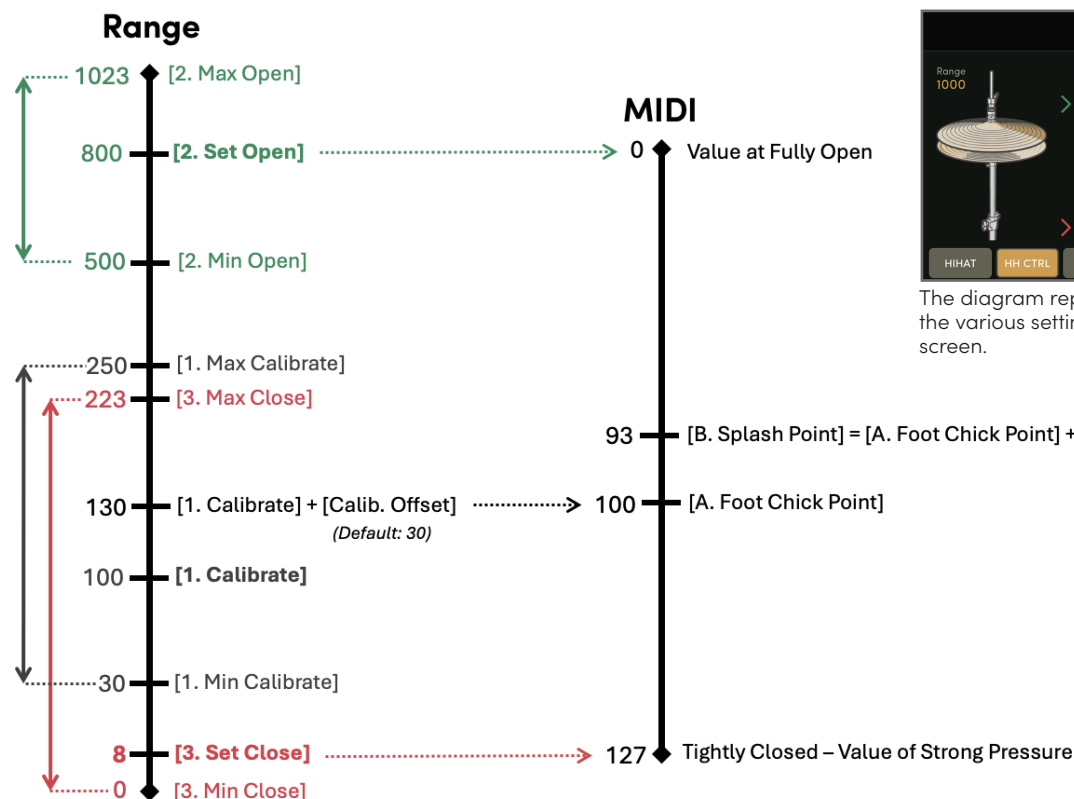
Each step can be performed independently when required. The instruction message 'RETRY' displays when an invalid (INV) value is set.

HIHAT CONTROL SETUP

After completing the 3-step setup, you can begin playing the HiHat. Additional HiHat control settings allow you to further refine its response. The HiHat's bow, edge, and bell zone triggering are controlled similarly to other cymbals. To access these settings, press the **[HIHAT]** button on the Cymbal Trigger screen (p.30).

Understanding HiHat Control

The ALCHEM-E HiHat employs magnetic force variations to gauge the distance between the top and bottom cymbals, measuring the open-close state. Calibration is important for accurate measurement, and it's recommended to periodically run through the three-step HiHat control setup. The diagram illustrates how the various HiHat control settings interact to deliver the open-close, foot chick, and foot splash functions.



The diagram represents the relationship between the various settings found on the HiHat control screen.

HiHat Control Settings Tabs

The tables describe the functions of the settings in each tab.

Tab	Setting	Function	Values
Set	1. Calibrate	Loosen the clutch and allow the top cymbal to rest on the bottom cymbal. Press the button to set the current range value as the 1. Calibrate point.	Min: 30 Max: 250
	2. Set Open	Lift the top cymbal to the desired height and lock the clutch. Press the button to assign the current range value as the 2. Set Open point.	Min: 500 Max: 1023
	3. Set Close	Close the HiHat with natural foot pressure. Press the button to assign the current range value as the 3. Set Close point. <u>Note:</u> The 2. Set Close point value must be less than the 1. Calibrate point value minus the Calibration Offset value.	Min: 0 Max: 223



The message 'RETRY' displays when an invalid (INV) range value is set for one of the three steps. The set values must be within the step's Min - Max limits.

HiHat Control Settings Tabs - Cont.

The table describes the functions of the settings in each tab.

Tab	Setting	Function	Values
Ft Chick	Foot Chick Gain	<p>The chick sound's dynamics are determined by the HiHat's closing speed. The principle is that faster closing requires greater force.</p> <ul style="list-style-type: none"> If the foot speed is slow and the chick sound is too quiet, increase the gain until the maximum volume level is achieved. If the foot chick sound is consistently too loud when triggered, reduce the gain. 	-24.0 to 24.0 dB
	Velocity Curve	Adjust the velocity curve in combination with the gain setting to achieve a natural dynamic control over the foot chick sound.	-10 to 10
Ft Splash	Foot Splash Gain	<p>Similar to the foot chick, the volume of the foot splash sound is determined by the HiHat's closing speed.</p> <ul style="list-style-type: none"> If the foot speed is slow and the splash sound is too quiet, increase the gain until the maximum volume level is achieved. If the splash sound is consistently too loud when triggered, reduce the gain. 	-24.0 to 24.0 dB
	Velocity Curve	Adjust the velocity curve in combination with the gain setting to achieve a natural dynamic control over the foot splash sound.	-10 to 10
Offset	Splash Sensitivity	<p>Splash Sensitivity determines the system's responsiveness in recognizing a quick open-close motion as an attempt to trigger a HiHat splash.</p> <ul style="list-style-type: none"> A lower setting requires a faster open-close action to trigger the splash. A higher setting allows slower open-close actions to trigger the splash. <p>Try experimenting until you find a setting that works consistently for your splash playing technique.</p>	0 to 100
	Splash Point Offset*	<p>The splash point is always slightly above the foot chick point (see the diagram on p.32). The Splash Point Offset setting adjusts the relative splash point. A higher offset value makes it easier to trigger a splash, but may lead to unwanted splash triggering when playing foot chicks.</p> <p>Adjust the Splash Point Offset setting only if you cannot dial in splash triggering using the Splash Sensitivity setting. The range is from -32 to -1, with -1 representing the shortest distance between top and bottom cymbals, and -32 the largest distance.</p>	-32 to -1
	Calibration Offset*	<p>In HiHat playing, the felt close point is influenced by variations in foot power and the angle of contact between the cymbals. To achieve consistent open-close control and foot chick triggering, these variations are controlled for using the Calibration Offset setting.</p> <p>For most players, it should be unnecessary to change the default value (-27).</p>	0 to 100

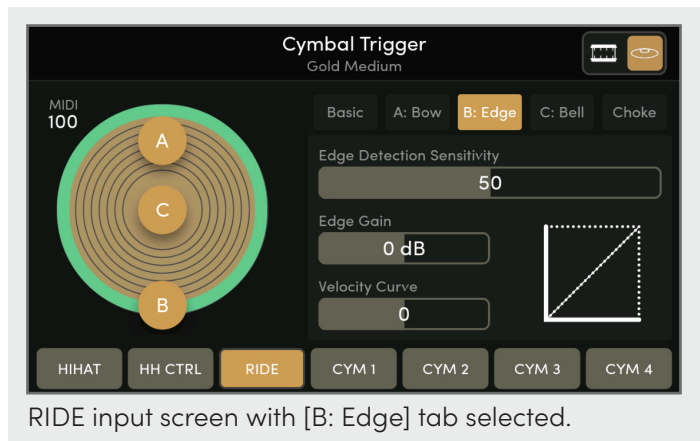
*For optimal performance, it is recommended to leave these advanced settings unchanged from their default values.

CYMBAL TRIGGER SETTINGS

The settings in this section apply to the following cymbal inputs: RIDE, CYM 1, CYM 2, CYM 3, and CYM 4.

Access the Cymbal Trigger screen and select a cymbal button to view trigger indicators and settings tabs. Each cymbal input has three zones (A: Bow, B: Edge, C: Bell) for adjustment.

Press the (A, B, C) buttons on the trigger indicator to toggle graphic indicators. indicators on and off.



Cymbal Trigger Settings

The table outlines the functions of the settings organized by tab.

Tab	Setting	Function	Values
Basic	Preset	The trigger preset should match the cymbal model connected to the input. This is set automatically during the E-VAULT Setup process.	See 'Preset List'
	Threshold	Set the threshold level to determine the minimum point of triggering for the cymbal input.	-96.0 to -20.0 dB
	Zone Mode	This setting controls how different zones are triggered in response to playing. Triggering can also be disabled (OFF).	See p.25 'Zone Mode'
	Mask Time	Sets the minimum time interval between triggers.	10 to 100 ms
A: Bow	Bow Gain	Set the gain level so that maximum dynamics are achieved for a strong bow hit.	-24.0 to 24.0 dB
	Velocity Curve	Adjust the Velocity Curve in combination with Bow Gain to achieve natural dynamic response.	-10 to 10
B: Edge	Edge Detection Sensitivity	Adjust the detection sensitivity so that cymbal edge hits consistently trigger zone B (Edge).	0 to 100
	Edge Gain	Set the gain level so that maximum dynamics are achieved for a strong edge hit.	-24.0 to 24.0 dB
	Velocity Curve	Adjust the Velocity Curve in combination with Edge Gain to achieve natural dynamic response.	-10 to 10
C: Bell	Bell Detection Sensitivity	Adjust the detection sensitivity so that cymbal bell hits consistently trigger zone C (Bell).	0 to 100
	Bell Gain	Set the gain level so that maximum dynamics are achieved for a strong bell hit.	-24.0 to 24.0 dB
	Velocity Curve	Adjust the Velocity Curve in combination with Bell Gain to achieve natural dynamic response.	-10 to 10
Choke	Choke Sensitivity	Increase the touch sensitivity of cymbal choke.	0 to 100
	Choke Delay Time	Adjust to set a natural-feeling onset time for the choke.	-500 to +500 ms

Preset List: No Assign, E-FAMILY 16" Crash, E-FAMILY 18" Cr/R, E-FAMILY 20" Ride.

ADDITIONAL TRIGGER INPUTS

E-VAULT has additional drum and cymbal trigger inputs available for kit expansion. The trigger preset ‘No Assign’ is set for these inactive inputs.

Drum Trigger

Gold Medium

MIDI 0

A

B

C

Basic

A: Head

B: Rimshot

C: Rimclick

Preset

No Assign

Threshold

-70.0 dB

Zone Mode

Mask Time

OFF

18 ms

KICK

SNARE

TOM 1

TOM 2

TOM 3

TOM 4

Default ‘No Assign’ Trigger Preset for TOM 4

Cymbal Trigger

Gold Medium

MIDI 0

A

C

B

Basic

A: Bow

B: Edge

C: Bell

Choke

Preset

No Assign

Threshold

-70.0 dB

Zone Mode

Mask Time

OFF

18 ms

HIHAT

HH CTRL

RIDE

CYM 1

CYM 2

CYM 3

CYM 4

Default ‘No Assign’ Trigger Preset for CYM 4.

Additional Inputs By Kit Model


The table shows the additional trigger inputs that are available for each kit model.

Drum inputs can be used to connect an ALCHEM-E snare or tom drum.

Additional cymbal inputs can be used to connect an E-FAMILY cymbal, but not the 14" HiHat.

Kit Model	Drum Inputs	Cymbal Inputs
Bronze EX	TOM 4	CYM 3, CYM 4
Gold	TOM 2, TOM 4	CYM 2, CYM 3, CYM 4
Gold EX	TOM 4	CYM 3, CYM 4

Set Up A New Trigger Input


1. With E-VAULT powered off, connect the drum or cymbal to the compatible trigger input on the module’s rear panel.
2. Press the power button to start E-VAULT.
3. Press the [TRIG] button to access the Trigger Workspace.
4. Use the Drum-Cymbal Selector  to switch to either the Drum Trigger or Cymbal Trigger screens.
5. Select the input button corresponding to the drum or cymbal connected in step 1.
6. Select the [Basic] tab.
7. Open the ‘Preset’ dropdown list and select the option that matches the model of the connected drum or cymbal. This selection enables the input with default trigger settings.
8. Adjust the input’s trigger settings for the input to fit your playing style.



E-VAULT’s factory kits do not have instruments assigned to TOM 4, CYM 3 and CYM 4. Expanding your kit setup to utilize these trigger inputs necessitates editing the kits and assigning instruments from E-VAULT’s sound library.

MIX WORKSPACE

MIXER DRUMS | CYMBALS

Press the **MIX** button on the module to open the **MIXER** screen. The 12-channel mixer has two group views for drum inputs (MIXER Drums) and cymbal inputs (MIXER Cymbals). Use the Drum-Cymbal Selector  to switch between the MIXER Group views.

MIXER Group	Channels Kit Inputs
Drums	KICK, SNARE, TOM 1, TOM 2, TOM 3, TOM 4
Cymbals	HIHAT, RIDE, CYM 1, CYM 2, CYM 3, CYM 4




The screenshot shows the 'MIXER Drums' interface for the 'Motown Pocket' kit. At the top, there are four buttons: 1 (Mix Hub Screen Button), 2 (Mixer Lock Button), 3 (FX Screen Button), and 4 (Drum-Cymbal Selector). Below these are six rotary knobs labeled KICK, SNARE, TOM 1, TOM 2, TOM 3, and TOM 4, each with a 'C' in the center. These are labeled as 5 (Pan Knob Controls). Below the knobs are six vertical faders, each labeled '0.0 dB' at the bottom. These are labeled as 6 (Level Slider Controls).


- 1 Mix Hub Screen Button
- 2 Mixer Lock Button
- 3 FX Screen Button
- 4 Drum-Cymbal Selector
- 5 Pan Knob Controls
- 6 Level Slider Controls

Kit Mixer Settings

Mixer settings, FX (Ambience), and multi-out settings are stored as parts of the kit's data. Each kit features distinct mixer settings for instrument volume levels and panning.


- » Use the Drum-Cymbal Selector  to switch between mixer group views.
- » Select a control on the screen by either touching it or using the D-Pad.
- » To adjust the selected control's value, either touch-drag on the control or turn the encoder.


Mixer Channel Setting	Function	Values
Pan	Use the rotary knobs to adjust the stereo panning positions of the input mixer channels	L63 • C • R63
Level	Use the faders to adjust the volume levels of the input mixer channels	-99.9 to 10.0dB



Press the **Mixer Lock Button** to 'lock' the mixer controls. When locked, the mixer controls cannot be selected or adjusted by touch. Press the button again to 'unlock' and re-enable touch selection and adjustment.

MIX HUB

To access the **Mix Hub** screen, press the  icon located on the MIXER screen. In the Mix Hub, you can adjust input and output volume levels and set up routing to the main and headphone outputs. In addition, the Mix Hub provides access to the Mix Workspace Menu, the FX Settings screen, and the Multi-Out Settings screen.



1 Mix Workspace Menu

2 Kit Save Button

3 Screen | Loaded Kit

4 FX Screen Button







5 Screen Tabs

6 Volume Level Controls

Mix Hub | MIX Tab

The MIX tab is displayed by default when the screen is first opened. The MIX tab has grouped volume level fader controls for inputs and outputs. Except for Kit Level, all the volume level settings in this tab are global settings.



- » Select a control on the screen by either touching it or using the D-Pad.
- » To adjust the selected control's value, either touch-drag on the control or turn the encoder.

Group	Icon	Setting	Function	Values
KIT PLAY		Kit Level	Controls the volume level of the mixed kit. This setting can be adjusted on the Edit Kit screen and is saved with the kit data.	-99.9 to 10.0dB
		Metronome Level	Controls the volume level of the metronome. This setting can be adjusted on the Kit Play Settings screen.	-99.9 to 10.0dB
INPUT		Auxiliary Input	Controls the input volume level of a stereo audio source connected to the AUX INPUT on the rear of the module.	-99.9 to 10.0dB
		Bluetooth Audio Input	Controls the input volume of a paired Bluetooth audio source.	-99.9 to 10.0dB
		USB Audio Input	Controls the input volume of two channels of audio returned from a USB-connected device (Computer, Tablet, Phone).	-99.9 to 10.0dB
OUTPUT	MAIN	Main Output	Controls the volume of the MAIN L-R outputs.	-99.9 to 10.0dB
		Headphone Output	Adjusts the volume of the headphone output. This setting operates independently from the headphone volume control knob on the module's top panel.	-99.9 to 10.0dB

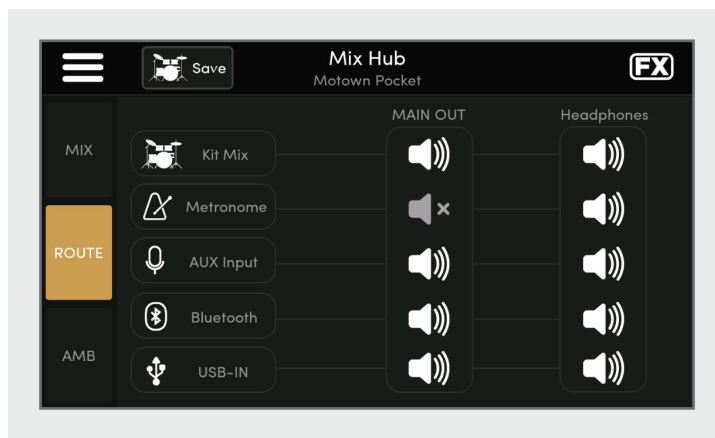
Mix Hub | ROUTE Tab

The ROUTE tab provides an easy way to manage the routing of different inputs to the MAIN OUT and Headphones output.

The ROUTE tab settings are global system settings.

- » Press the speaker icon to toggle an input routing ON  and OFF 

The screen example shows the metronome sound routed to the headphones output while being muted in the main output.

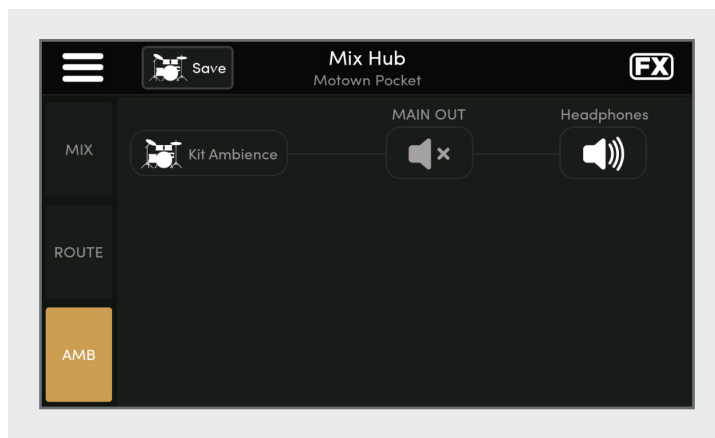


Mix Hub | AMB Tab


The AMB tab enables you to bypass the ambience effect processing on the MAIN Out and Headphones mix busses. This feature is useful in situations where you want to hear the ambience effect in the headphones mix while keeping the main output mix dry.

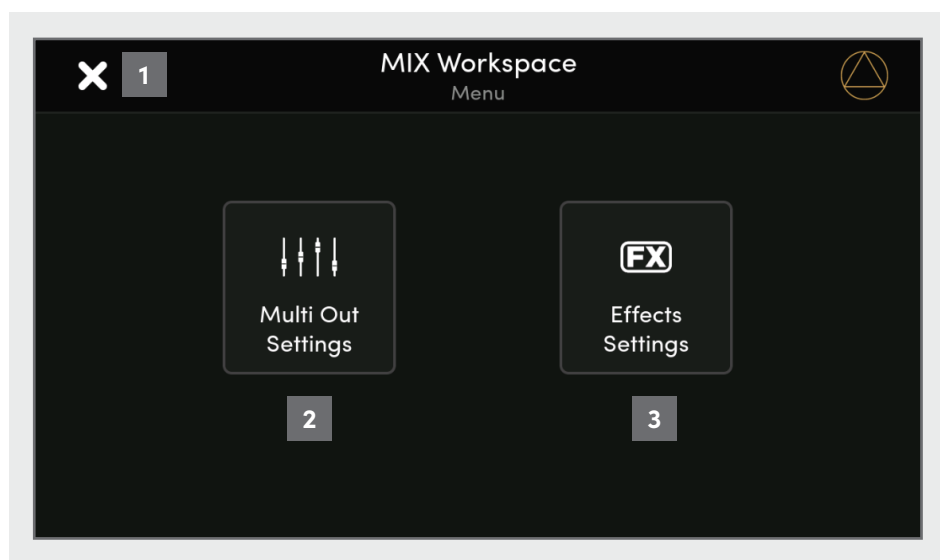
The AMB tab settings are stored as part of the kit's data.

- » Press the speaker icon to toggle ambience FX ON  and OFF 



MIX WORKSPACE MENU

To open the **MIX Workspace Menu** screen, press the  menu icon on the Mix Hub screen. The menu screen displays buttons to access the Multi Out Settings and the FX (Effects Settings) screens.



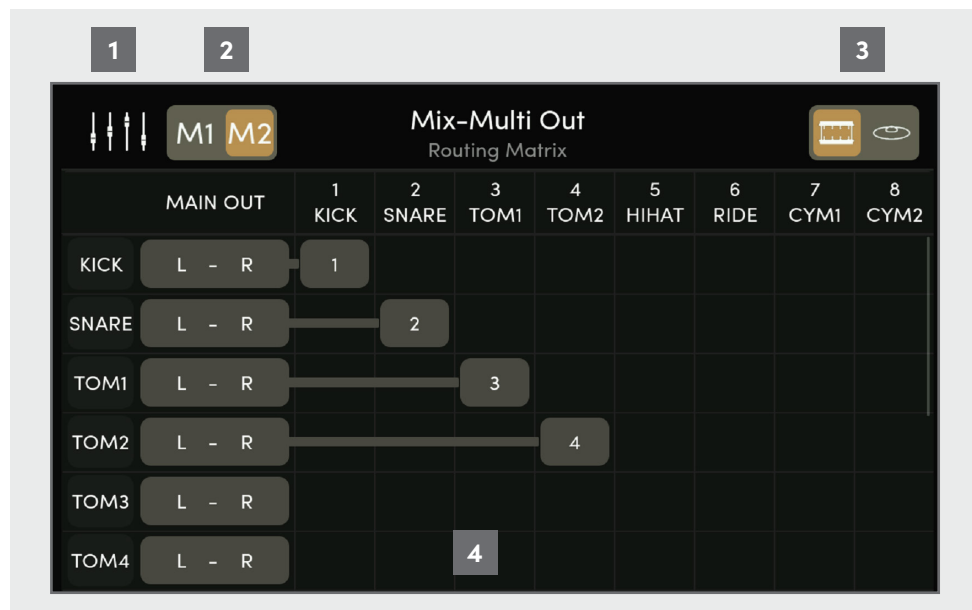
1 Close Screen Button

2 Multi Out Settings Screen Button

3 FX Settings Screen Button

MULTI OUT SETTINGS

The **Mix-Multi Out** screen is used to configure the audio output routing for the current kit. You can mute kit input channels in the MAIN Output bus, as well as select one of two multi out configurations (M1, M2) to manage how kit input channels route to the multi output channels.




1 Mix Hub Screen Button

2 Multi Out Config Switch

3 Drum-Cymbal Selector

4 Routing Matrix Area

- » Use the [M1 M2] switch to change the multi out configuration.
- » Use the Drum-Cymbal selector  to scroll the display between routing settings for the drums group and cymbals group.

M1 Multi Out Configuration (Fixed)

M1 is a fixed routing assignment for the multi outputs.

Summed Mono Outputs

- [1] KICK [2] SNARE [5] HIHAT [6] RIDE

Stereo Outputs

- [3-4] TOM 1, TOM 2, TOM 3, TOM 4
- [7-8] CYM 1, CYM 2, CYM 3, CYM 4

INPUT	MAIN OUT		Multi Out							
	Left	Right	1	2	3	4	5	6	7	8
KICK	L - R		1							
SNARE	L - R			2						
TOM 1	L - R				L - R					
TOM 2	L - R				L - R					
TOM 3	L - R				L - R					
TOM 4	L - R				L - R					
HIHAT	L - R						5			
RIDE	L - R							6		
CYM 1	L - R								L - R	
CYM 2	L - R								L - R	
CYM 3	L - R								L - R	
CYM 4	L - R								L - R	

Tap to mute these inputs to the MAIN OUT. The MAIN OUT routing stays the same with M1 and M2 multi out configurations.

M2 Multi Out Configuration (Adjustable)

M2 allows adjustable routing for multi outputs. Each of the 8 outputs can have one input channel assigned.

- » Tap the grid in routing matrix area to set an input-to-multi out channel assignment.

INPUT	MAIN OUT		Multi Out							
	Left	Right	1	2	3	4	5	6	7	8
KICK	L - R		1							
SNARE	L - R			2						
TOM 1	L - R				3					
TOM 2	L - R					4				
TOM 3	L - R									
TOM 4	L - R									
HIHAT	L - R						5			
RIDE	L - R							6		
CYM 1	L - R								7	
CYM 2	L - R									8
CYM 3	L - R									
CYM 4	L - R									

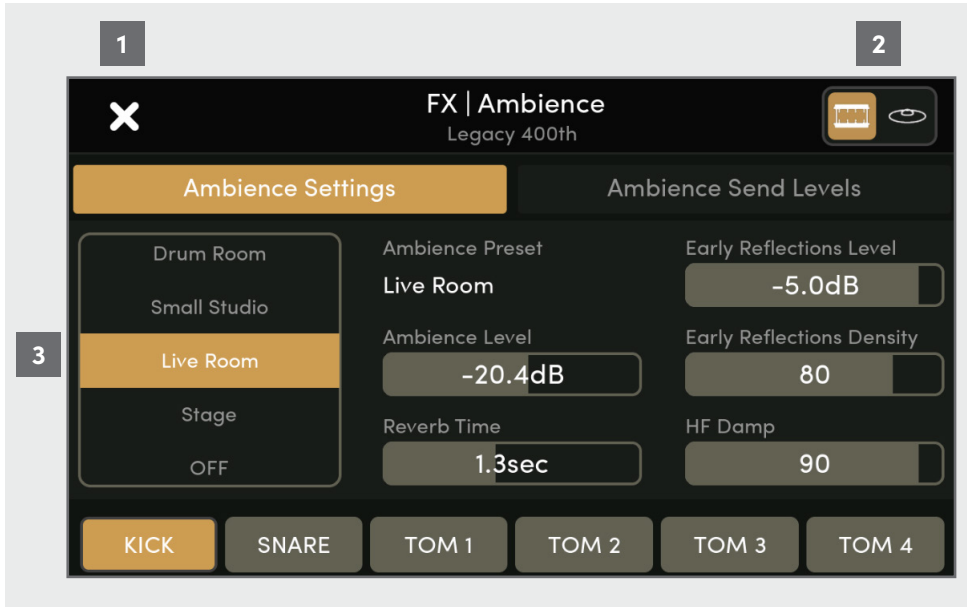


Multi out settings are saved with the kit's data, allowing different routings for each kit. The routing applies to both physical module outputs and USB audio outputs.

FX | AMBIENCE

The FX settings screen allows users to add an ambience effect to the loaded kit and adjust the send level for each input individually. The **Ambience Settings** tab is shown by default.

Select the **Ambience Send Levels** tab to adjust the ambience level for the selected input. Several ambience presets are provided, but their settings are not global. All ambience settings are saved with the kit's data.



- 1 Close Screen Button**
- 2 Drum-Cymbal Selector**
- 3 Ambience Presets**

Ambience Settings Tab

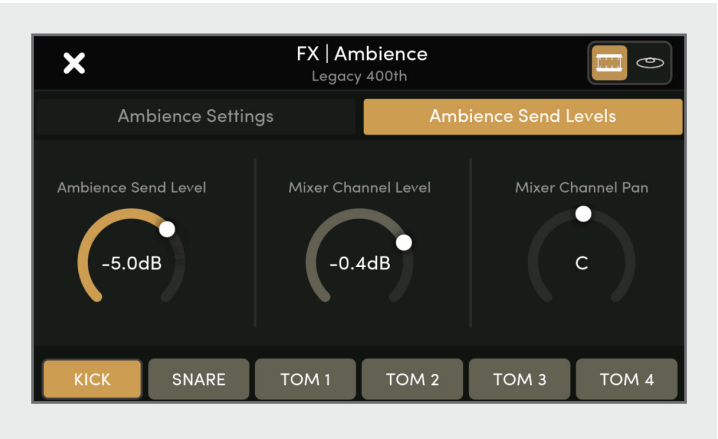
Selected factory kits have an ambience effect applied, which can subtly thicken or enhance the sound of the kit's instruments. Increasing the Reverb Time and Ambience Level makes the effect more noticeable as a room reverb.

Setting	Function	Values
Ambience Preset	A predefined setting that determines the characteristics of the ambience effect applied to the sound.	OFF, Enhance, Drum Booth, Small Studio, Live Room, Stage
Ambience Level	Controls the intensity of the ambience effect in the mix, allowing you to enhance or reduce its presence.	-99.9 to 0.0dB
Reverb Time	Specifies the length of time the reverb effect persists after the initial sound, influencing the perceived size and characteristics of the space in which the sound is placed.	0 to 3.0sec
Early Reflections Level	Adjusts the volume of the initial reflections of sound, contributing to the perception of space and depth.	-99.9 to 0.0dB
Early Reflections Density	Determines the number of early reflections, affecting the texture and clarity of the reverb effect.	0 to 100
HF Damp	Controls the attenuation of high frequencies in the reverb, allowing for a warmer or brighter sound.	0 to 100

Ambience Send Levels Tab

In the Ambience Send Levels tab, you can easily set the ambience level for a selected input. You can also adjust the input’s mixer level and pan settings without leaving the FX screen.

- » Select a drum or cymbal input.
- » Select the **Ambience Send Level** and adjust it using the encoder or by direct touch to find the ideal amount of ambience for the input and kit instrument.



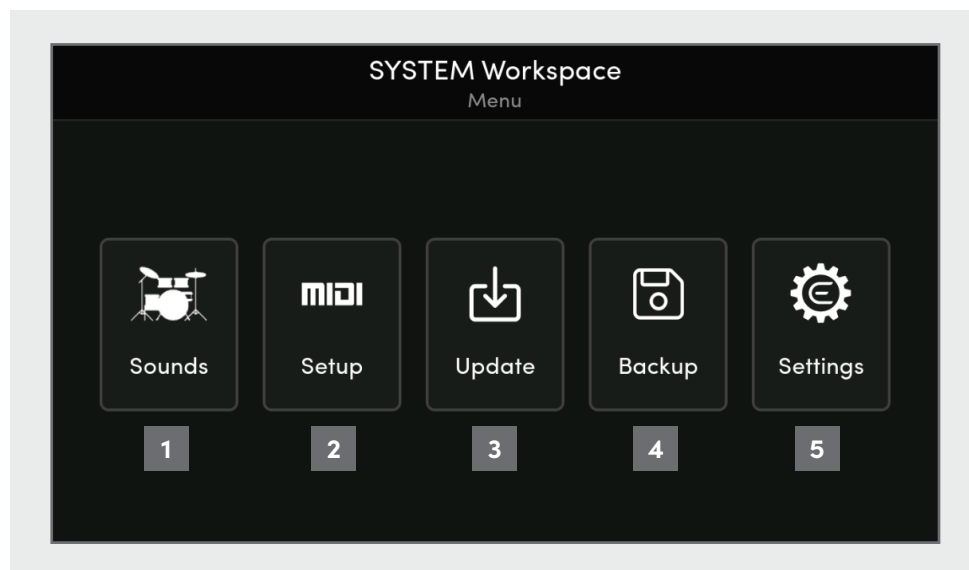
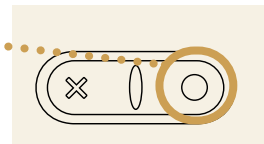
Setting	Function	Values
Ambience Send Level	Controls the amount of ambience effect applied to a specific kit input, allowing you to adjust how prominently the ambience influences the sound of the instrument assigned to that input.	-99.9 to 10.0dB
Mixer Channel Level	Controls the selected input’s volume level (dB).	-99.9 to 10.0dB
Mixer Channel Pan	Controls the stereo panning position of the selected input.	L63 • C • R63

Mixer Channel Level and Mixer Channel Pan settings can also be adjusted on the MIXER screens.

SYSTEM WORKSPACE

SYSTEM WORKSPACE MENU

Long press the [O] button to open the **SYSTEM Workspace Menu** screen. Press the menu buttons to access screen functions for sounds updates, MIDI setup, system updates, backups, and system settings.



1 E-VAULT Sounds Screen Button

2 MIDI Settings Screen Button

3 System Update Screen Button

4 Backup Screen Button

5 System Settings Screen Button

DOWNLOAD & COPY UPDATE FILES


The E-VAULT module supports two types of updates:

- » **Sounds:** Sound library updates.
- » **System:** Firmware updates.

Visit the Zildjian downloads page at <https://zildjian.com/pages/downloads> to download the latest system and sound updates.

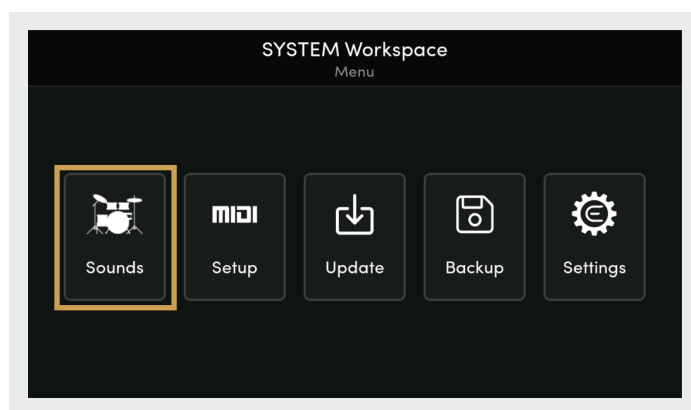
Follow the steps in the release's *Update Guide & Instructions* to install the updates.

E-VAULT SOUNDS

Press the [ Sounds] button on the SYSTEM Workspace Menu to open the **E-VAULT Sounds** screen.

The E-VAULT Sounds screen has two tabs that correspond to two different functions for updating the module's sound library:

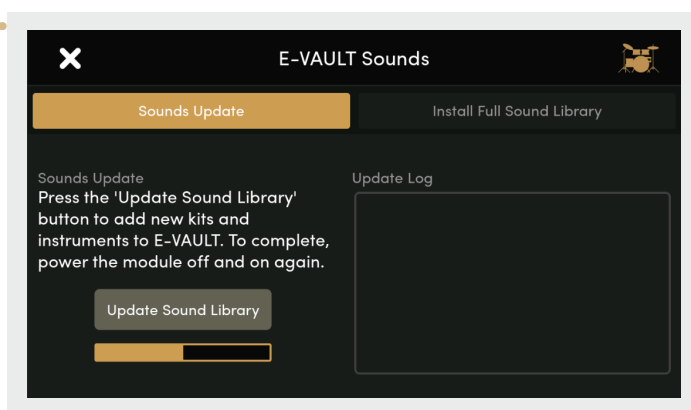
- » **Sounds Update**
- » **Install Full Sound Library**



Sounds Update	This process adds new factory content to the sound library. The process can also be used to adjust factory content. User kits and user instruments are not altered, but their sounds can change slightly if the update includes adjustments to factory tones.
Install Full Sound Library	This process installs a full sound library and removes all existing factory and user content.

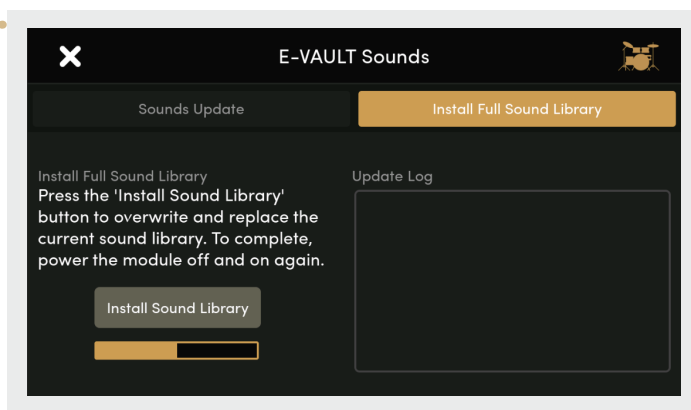
Sounds Update

1. Select the **Sounds Update** tab.
2. Press the [Update Sound Library] button.
3. During the installation, the button LEDs turn **red** and a progress bar displays. The Update log reports the installation steps.
4. When the installation is completed, the button LEDs turn **green** and the log message **UPDATE COMPLETED** is displayed.
5. Press the power button to shut down the module. This step completes the update.



Install Full Sound Library

1. Select the **Install Full Sound Library** tab.
2. Press the [Install Sound Library] button.
3. During the installation, the button LEDs turn **red**. The progress bar tracks the separate installation progress of each update file. The Update Log reports the installation steps.
4. When the installation is completed, the button LEDs turn **green** and the log message **UPDATE COMPLETED** is displayed.
5. Press the power button to shut down the module. This step completes the update.



MIDI SETTINGS

Press the [**MIDI** Setup] button on the SYSTEM Workspace Menu to open the **MIDI Settings** screen. The MIDI Settings screen allows you to customize E-VAULT’s MIDI settings, including the MIDI Channel and the MIDI Note Number values assigned to each input’s zones. These global settings apply to both USB-MIDI and 5-pin DIN MIDI.

Changes to MIDI settings are saved automatically when the module is powered off. To restore default MIDI settings, press the [Reset Factory MIDI] button. For more details, see the MIDI Specification section (p.49).

1

X

MIDI Settings

SNARE

MIDI Channel

10

MIDI settings are saved automatically.
Press the button below to reset E-Vault to
factory MIDI settings.

Reset Factory MIDI

Zone A: Head

SNARE

MIDI Note Number

38

MIDI Note

D2

KICK

SNARE

TOM 1

TOM 2

TOM 3

TOM 4


2

1 Close Screen Button

2 Drum-Cymbal Selector


3 MIDI Settings Tabs

Adjust MIDI Settings

Use the Drum-Cymbal selector  and the buttons at the bottom of the screen to choose the input. Select the tab for the input’s zone, then adjust the MIDI Note Number slider using touch or the encoder.

Setting	Function	Values
MIDI Channel	Determines which MIDI channel the E-VAULT module uses to communicate with connected MIDI devices and interfaces. Set the channel to match that of the device for proper functionality.	1 to 16
MIDI Note Number	The MIDI Note Number setting assigns a specific note value to the selected input zone, corresponding to the sound triggered when a drum or cymbal is hit. Adjusting this number is helpful when connecting E-VAULT to a software instrument or another hardware sound module, ensuring the desired sound is played.	0 to 127 (C- to G9)

SYSTEM UPDATE

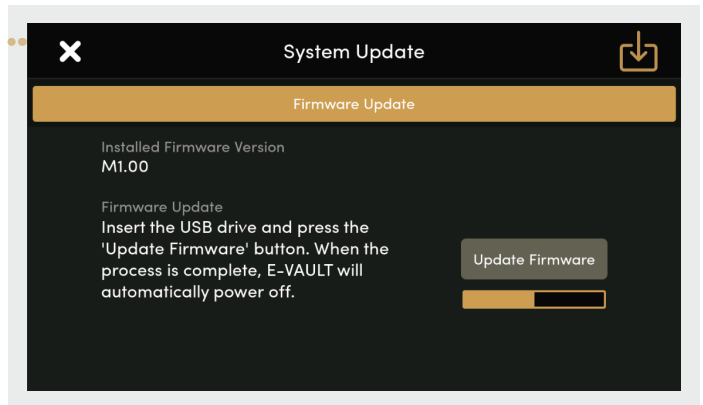
Press the [ Update] button on the SYSTEM Workspace Menu to access the **System Update** screen. Before updating the E-VAULT module, check the installed firmware version and confirm that the correct update files are on the connected flash drive.

Download the latest system update: <https://zildjian.com/pages/downloads>


Update the Firmware

1. On the System Update Screen, press the [Update Firmware] button.
2. When the update starts, the button LEDs will turn off and a progress bar displays.
3. When the update process is completed, the E-VAULT module automatically powers down.

Please do not disconnect the module's power during the update process.



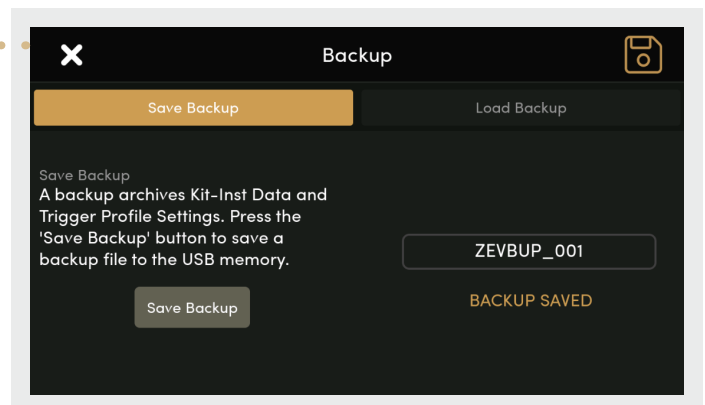
BACKUP

Press the [ Backup] button on the SYSTEM Workspace Menu screen to open the **Backup** screen. This screen allows you to save and load backups of sound library data and trigger settings to and from the connected flash drive.

- » **Kit-Inst Data:** Kit, instrument and tone data is included in the backup.
- » **Trigger Profile:** All trigger settings are included in the backup.

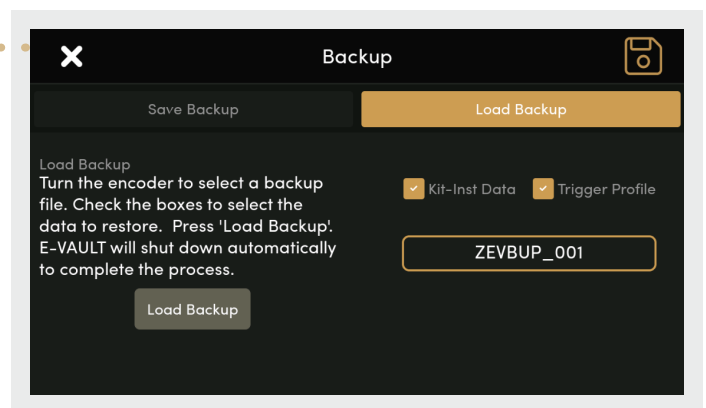
Save Backup

1. Open the Save Backup tab.
2. Turn the encoder to select the backup file number to save to. The backup file name is preconfigured. Press the [Save Backup] button.
3. The LEDs illuminate **red** and change to **green** once the backup process is complete. The message **BACKUP SAVED** is displayed.




Load Backup

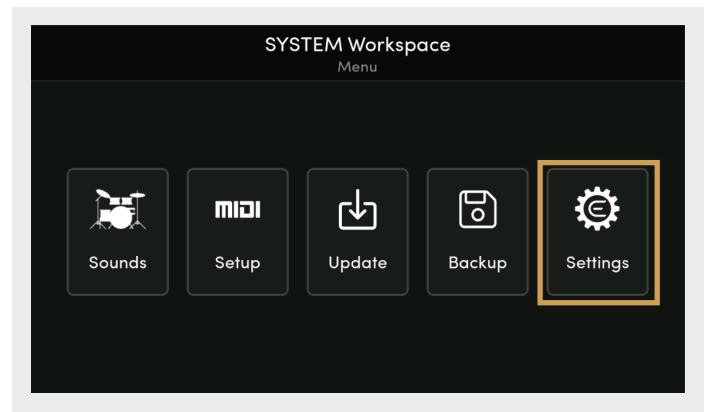
1. Open the Load Backup tab.
2. Turn the encoder to choose the backup file you want to load.
3. Check the data options to load from the backup file (Kit-Inst Data, Trigger Profile).
4. Press the [Load Backup] button. The LEDs illuminate **red** during the backup load. The E-VAULT module automatically powers down to complete the process.
5. Power on the module and the system data loaded from the backup is restored.



SYSTEM SETTINGS

Press the [ Settings] button on the SYSTEM Workspace Menu to open the **System Settings** screen.

The System Settings screen features six tabs that offer access to essential system controls and information.

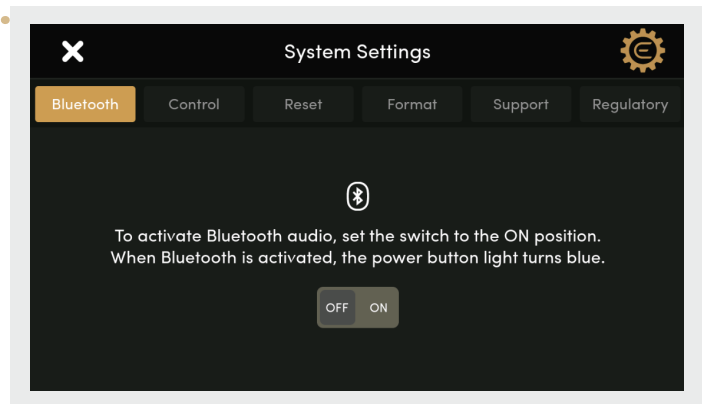


Bluetooth

Select the Bluetooth tab.

- » Toggle the switch to the ON position to activate E-VAULT's Bluetooth audio function.
- » The power button LED will turn **blue** to indicate that Bluetooth is enabled.

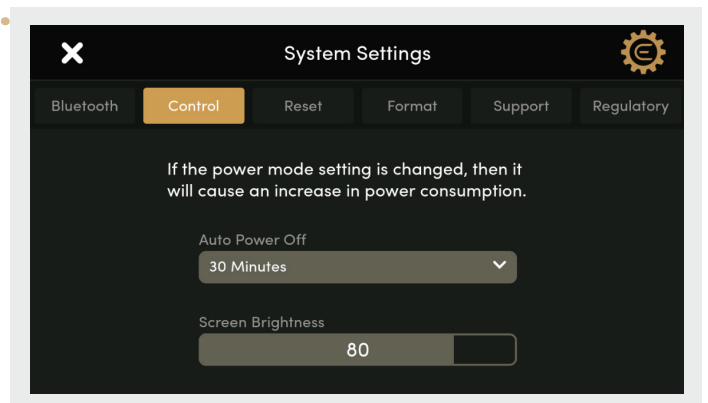
Adjust the input level and routing of Bluetooth audio on the Mix Hub screen (p.37).



Control

Select the Control tab to modify E-VAULT's auto power off and screen brightness settings.

- » Press the dropdown to choose from the available auto power off options: OFF, 30 minutes, 1 hour, 2 hours, or 4 hours.
- » Adjust the screen brightness by sliding the control or turning the encoder.



Reset

Select the Reset tab to perform one of two module reset types.

E-VAULT Setup

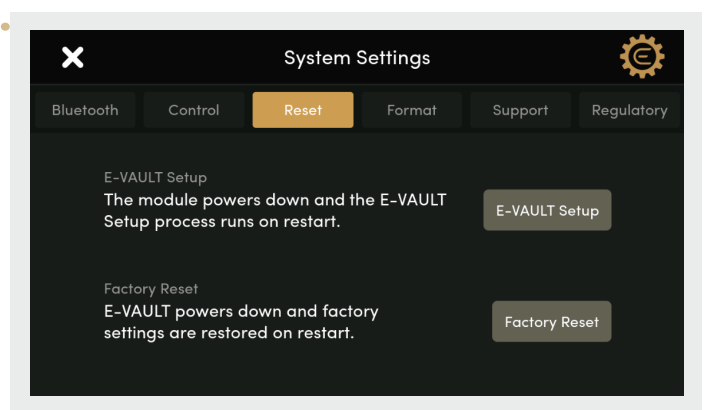
This process initializes the system with a factory trigger profile (p.8).

- » Press the [E-VAULT Setup] button, and the module will power down. The E-VAULT Setup process will run on the next restart.

Factory Reset

A factory reset restores the module's sound library data to its previous update state and deletes user kits and user instruments. Trigger settings will also be reinitialized, as the E-VAULT setup runs upon module restart. Additionally, other system settings will change, including turning off Bluetooth and resetting auto power off to its default value of 30 minutes.

- » Press the [Factory Reset] button to start the factory reset process.



SYSTEM SETTINGS (CONTINUED)

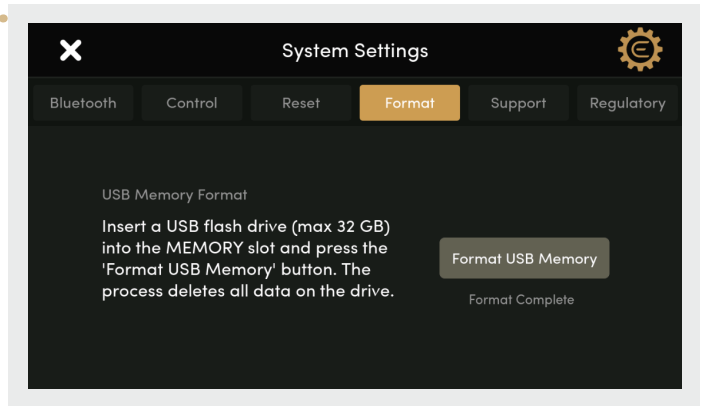
Format

Select the Format tab to format the flash drive connected to the module's MEMORY input.

- » Press the [Format USB Memory] button to format the flash drive (FAT32).



The Zildjian 32GB USB flash drive included in the package must be formatted before use.

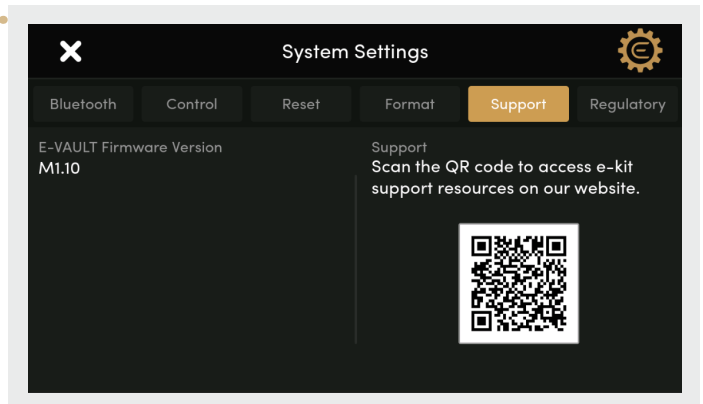


Support

The Support tab features a QR code that directs you to the ALCHEM-E support pages on the Zildjian website:

<https://zildjian.com/pages/alchemy-e-support>

Additionally, the tab shows the currently installed firmware version.



Regulatory

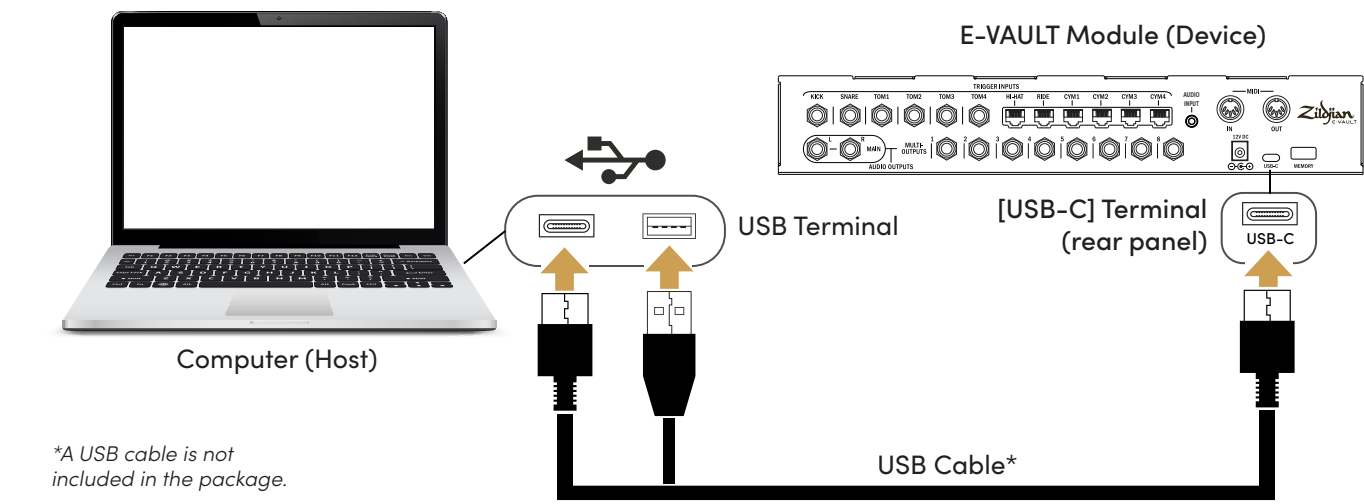
Select the Regulatory tab to view compliance information.



REFERENCE

CONNECTING E-VAULT TO A COMPUTER

Connecting the E-VAULT module to a computer using a USB cable enables you to send and receive MIDI and audio data.



**A USB cable is not included in the package.*

Select the appropriate USB cable (either USB-C to USB-C or USB-C to USB-A) to connect E-VAULT to your computer. The E-VAULT module is a class-compliant device (windows, macOS), meaning that no extra drivers are required to enable its USB MIDI and audio functions.

Once connected via USB, the module will be recognized by the host as “Zildjian E-Vault.”

The table below shows how E-VAULT’s USB audio channels are configured when it is connected to the host system.

E-VAULT	Mixer Channels	Host USB Audio Channels
USB Audio In	-	Out - Ch 1 Out - Ch 2
USB Audio Out	MAIN OUT L MAIN OUT R Multi-Out 1 Multi-Out 2 Multi-Out 3 Multi-Out 4 Multi-Out 5 Multi-Out 6 Multi-Out 7 Multi-Out 8	IN - Ch 1 IN - Ch 2 IN - Ch 3 IN - Ch 4 IN - Ch 5 IN - Ch 6 IN - Ch 7 IN - Ch 8 IN - Ch 9 IN - Ch 10

About USB Audio In

The volume and routing for the two channels of USB audio received from the host computer (USB IN) are adjusted on the Mix Hub screen. If the E-VAULT’s mixer routing is configured to send USB IN audio to MAIN OUT, please note that this only applies to the analog outputs.

MIDI SPECIFICATION

Default MIDI Channel = 10

Kit Instrument MIDI Note Map [DRUMS]

Below are the factory default MIDI note assignments for kit inputs.

KICK

Zone	Zone Area	MIDI Note #	Pitch
A	Head Beater Shot	36	C2

SNARE

Zone	Zone Area	MIDI Note #	Pitch
A	Head Shot	38	D2
B	Rim Shot	40	E2
C	Cross Stick (X-Stick)	37	C#2

TOM 1

Zone	Zone Area	MIDI Note #	Pitch
A	Head Shot	48	C3
B	Rim Shot	50	D3
C	Rim Click	84	C6

TOM 2

Zone	Zone Area	MIDI Note #	Pitch
A	Head Shot	45	A2
B	Rim Shot	47	B2
C	Rim Click	85	C#6

TOM 3

Zone	Zone Area	MIDI Note #	Pitch
A	Head Shot	43	G2
B	Rim Shot	58	A#3
C	Rim Click	86	D6

TOM 4

Zone	Zone Area	MIDI Note #	Pitch
A	Head Shot	41	F2
B	Rim Shot	39	D#2
C	Rim Click	87	D#6

Kit Instrument MIDI Note Map [CYMBALS]

Below are the factory default MIDI note assignments for kit's cymbal inputs.

HIHAT

Zone	Zone Area	MIDI Note #	Pitch
A	Bow	46	A#2
B	Edge	26	D1
C	Bell	44	G#2
D	Foot Chick Splash	27	D#1

HIHAT CTRL

See page 51 for a detailed description of HiHAT Control MIDI settings.

RIDE

Zone	Zone Area	MIDI Note #	Pitch
A	Bow	51	D#3
B	Edge	59	B3
C	Bell	53	F3

Cymbal Choke:

Mapped to the polyphonic aftertouch value of the Zone A note [51].

O = No Choke, 127 = Fast Choke

CYM 1

Zone	Zone Area	MIDI Note #	Pitch
A	Bow	49	C#3
B	Edge	55	G3
C	Bell	89	F6

Cymbal Choke:

Mapped to the polyphonic aftertouch value of the Zone A note [49].

O = No Choke, 127 = Fast Choke

CYM 2

Zone	Zone Area	MIDI Note #	Pitch
A	Bow	57	A3
B	Edge	52	E3
C	Bell	91	G6

Cymbal Choke:

Mapped to the polyphonic aftertouch value of the Zone A note [57].

O = No Choke, 127 = Fast Choke

CYM 3

Zone	Zone Area	MIDI Note #	Pitch
A	Bow	80	G#5
B	Edge	81	A5
C	Bell	82	A#5

Cymbal Choke:

Mapped to the polyphonic aftertouch value of the Zone A note [80].

O = No Choke, 127 = Fast Choke

CYM 4

Zone	Zone Area	MIDI Note #	Pitch
A	Bow	92	G#6
B	Edge	94	A#6
C	Bell	95	B6

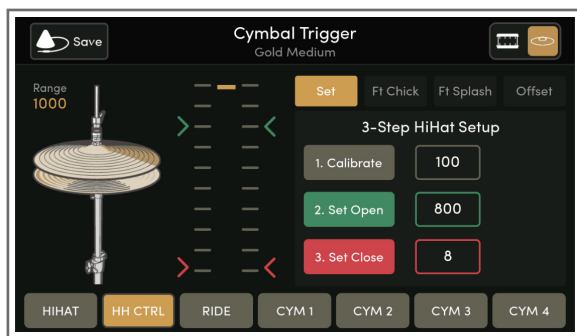
Cymbal Choke:

Mapped to the polyphonic aftertouch value of the Zone A note [92].

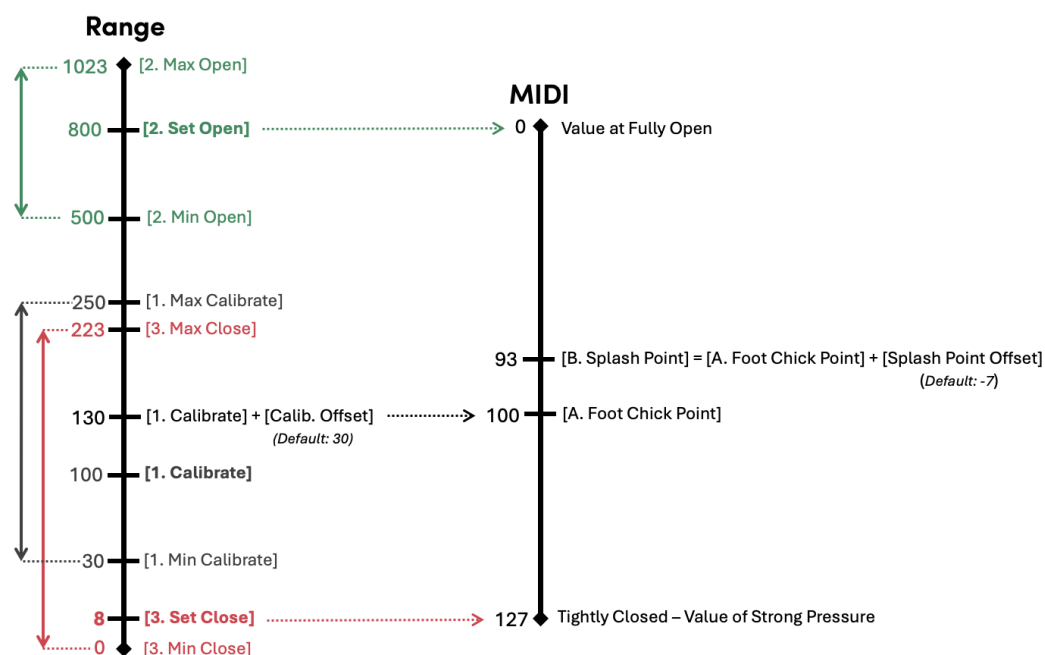
O = No Choke, 127 = Fast Choke

HiHat Control MIDI Settings

The HiHat's open-close control is mapped to MIDI CC#4 (MIDI Continuous Control Change). The figures below show the relationship between the **Range** settings of the hihat control sensor and MIDI CC#4 values.



Range Point	HH CTRL MIDI CC #4
Set Open	0
Calibrate	100
Set Closed	127



Triggering Foot Chick | Foot Splash

The foot chick and foot splash sounds are triggered by same MIDI Note [27, D#1]. The HiHat's open-close MIDI CC value determines if the foot chick or foot splash is triggered.

- If the MIDI CC#4 value is set to 127 before sending the foot note-on message, the foot chick is triggered.
- If the CC value is set to 0 before sending the foot note-on message, the foot splash is triggered.

Foot Close: HiHat Mute Polyphonic Aftertouch

To properly close the HiHat, a polyphonic aftertouch value for the foot note [27: D#1] must be sent before the note-on message. If this polyphonic aftertouch value is not transmitted, the currently playing HiHat's sound will not mute, resulting in the subsequent foot chick sound overlapping with it.

- Foot note [27: D#1] polyphonic aftertouch value = 0 [No Mute]
- Foot note [27: D#1] polyphonic aftertouch value = 1 [Slow Mute] to 127 [Fast Mute]

MODULE SPECIFICATION

The specifications and appearance of this product are subject to change without notice for improvement.

The table below lists the specifications of the product at the time this document was published. For the latest information on product specification, please refer the Zildjian website:

<https://zildjian.com/pages/alchem-e-electronic-drum-kits>

Model	E-Vault
Display	5" Touchscreen LCD, 1280 x 720, LED Backlit Buttons
Connectors	TRIGGER INPUTS jack x 6: 1/4-inch (6.35mm) TRS phone type TRIGGER INPUTS terminal x 6: RJ45 type (exclusive use with cymbals) AUDIO OUTPUTS (MAIN) jacks (L, R): 1/4-inch (6.35mm) TRS phone type, balanced AUDIO OUTPUTS (MULTI OUTPUTS) jack x 8: 1/4-inch (6.35mm) TRS phone type, balanced HEADPHONES jack: Stereo 1/4-inch (6.35mm) phone type (32 ohms recommended) AUX INPUT jack, Stereo 1/8-inch (3.5mm) miniature phone type MIDI (IN, OUT) 5-PIN DIN Connectors USB-C port: USB-C type, supports high-speed MIDI and multi-channel audio MEMORY: USB Flash Drive (FAT32, 32GB maximum) DC IN jack
USB Audio	Zildjian E-VAULT is a USB Class Compliant audio device (windows, macOS) 48 kHz, 16-bit audio Output: 10 channels Input: 2 channels
Bluetooth®	Input: 2 Channel, Stereo (A2DP)
Power Source	AC Adapter (DC 12V)
Current	2A*
Dimensions	300 (W) x 166 (D) x 78.9 (H) mm 13 (W) x 6-9/16 (D) x 3-1/8 (H) inches
Weight	2.19 kg/4 lbs 13.1 oz
Accessories	Quick Start Guide 12V DC 2.0A 24W Power Adapter 32GB USB Flash Drive Microfiber Cleaning Cloth Mounting Plate (Black, with four M5 x 10mm screws)

*Average current consumption is approximately 1.6A under normal conditions.

IMPORTANT INFORMATION

Preventing Data Loss

- Data stored in the module can be lost due to equipment failure, incorrect operation, or other causes. Creating regular back ups can protect you from any data loss.
- Zildjian assumes no liability regarding any data loss.

Packaging Disposal

- You must comply with the waste disposal regulations in your locality when disposing of the packaging the instrument was shipped in.

Connecting and using a USB Flash Drive

- Prior to inserting the USB drive into the module, discharge all static electricity from your person to prevent damage.
- Do not remove the USB drive while reading or writing is in progress.

Intellectual Property Rights

- The copyright of content in this product (the sound waveform data, style data, accompaniment patterns, phrase data, audio loops and image data) is reserved by Zildjian.
- The original content and any subsequent sounds provided by Zildjian are for personal use by the purchaser and for use in the production and distribution of original compositions. Do not use the instrument in any way that could infringe on another's copyright. Zildjian assumes no liability regarding any infringements of a third-party's copyright arising through your use of the instrument.
- The included content and any subsequent sounds provided by Zildjian cannot be extracted and distributed in original or modified form.

Date of Manufacture

The letters in the 5th and 6th character positions of the serial number denote the year of manufacture, and the character in the 7th position denotes the month.

Year (last two digits)

5th/6th Characters: A to I = 1 to 9 • 0 = J

Month

7th Character: A to L = 1 to 12

About this Document

Zildjian E-VAULT Electronic Drum Module User Manual (ZAUM):

Version 1.0 (D).



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